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Knowledge, attitude and practices of mothers of pre-school children enrolled at Anganwadi centres in Udaipur region

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Abstract

Pre-school (3 to 6 years), is the third developmental stage in a human's lifespan after the infant, toddler. The meals of pre-school children should be nutrient-dense and include a range of food groups, and they should be fed often and in sufficient amounts throughout the day. In order to determine mothers' knowledge, attitudes, and practices regarding child nutrition, a cross-sectional study was conducted with a total of 120 children, 64 were boys and 56 were girls. Mothers of children from Anganwadi centres in Udaipur, Rajasthan, participated in the study. Data was collected according to the statements on Knowledge of respondents on eating pattern of children, Attitude and Practices to overcome malnutrition. Total three sections were made in which close ended statements. Which was then assessed on the basis of overall scores of respondents. According to the results, per cent of respondents had good level of knowledge about the food and food groups and were aware of health complications of unhealthy food choices. It was discovered that overall score of Attitude of mothers in keeping their child healthy was substantially good. As 57.5 per cent strongly agreed and 23.33 per cent of respondents agreed to good attitude towards child eating pattern and following healthy diet. Results of overall score of Practices followed by mother respondents to identify and overcome malnutrition revealed that around 35 per cent of mother always follow good practices and 16.66 per cent of them often follow healthy practices. Thus, mothers' level of nutrition education influences what their children consume.

Keywords: Pre-school children, Anganwadi centres, maternal nutritional knowledge, attitude and practices

Introduction

In India, an estimated 26 million of children are born every year. As per Census 2011, the share of children (0-6 years) accounts 13 per cent of the total population in the Country. The child health programme under the National Health Mission (NHM) comprehensively integrates interventions that improve child survival and addresses factors contributing to infant and under-five mortality.

More than 43 per cent of young children under 5 years of age are susceptible to not achieving their optimum development due to the risks of poverty and inadequate nutrition likewise, a lack of access to essential services and early enhancing possibilities (UNICEF Programme Division, 2017). For the welfare, development, and protection of children, the Ministry of Women and Child Development is putting numerous programmes into force. (ICDS, 2009) [6]. According to numerous studies, children who are undernourished are not always the product of poverty. In communities where there is poverty and child malnutrition, some mothers are able to adopt successful practices that resulted in well-nourished children. (Berggren & Wray, 2002) [2]. Positive deviant mothers can be distinguished from other mothers based on their child care attitudes, beliefs, and practises as well as how they make use of their limited resources. Mothers are the primary care givers for their children, and the standard of care they give depends greatly on how well they understand nutrition and healthy lifestyle choices. (Glewwe, 1999) [5].

The Anganwadi centres are the first point of contact for millions of children and their parents with the formal education system in India. The pre-school education provided at these centres is informal and flexible, designed to prepare children for formal schooling. The curriculum involves interactive play, storytelling, songs, and simple activities that nurture children's curiosity and love for learning while enhancing their cognitive, emotional, and social skills. This present study was carried out on a total 120 mothers of Pre-School Children enrolled in Anganwadi centres of Udaipur city with the objective to determine the Knowledge, Attitude and Practices of mothers towards child nutrition.

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Methodology

This is a cross-sectional study approved by the research committee of Maharana Pratap University of Agriculture and Technology (MPUAT).

Selection of Samples

The participants who participated are those whose children are enrolled in Anganwadi centres in Udaipur. The respondents were only mothers from age ranging from 18–45 years. The inclusion criteria was to select only those whose children were receiving Pre-school education at Anganwadi centres in urban areas. Mothers whose children were not getting Pre-school education from Anganwadi centres were excluded from the samples. A random sampling method was used to select these participants. The sample size was 120 mother participants.

The participants were approached through respective Anganwadi centres. Respondents were briefly explained about the objectives of the study. A well-structured and self-designed questionnaire was developed for the study. The questionnaire had general background information regarding age, type of family, education qualification, number of children, address and annual family income that were included in this section. For assessing Knowledge, Attitude and Practices of selected mothers of pre-school children of Anganwadi centres. Pre-testing was done using KAP tool and based on the respondents of pre-testing desirable changes were made in KAP tool. After pre-testing, the information was collected according to the statements on Knowledge of respondents on eating pattern of children, Attitude and Practices to overcome malnutrition. Total three sections were made in which close ended statements. Which was then assessed on the basis of overall scores of respondents. The data was collected via oral questionnaire method.

Statistical analysis was done by SPSS software. The collected data was entered into excel sheet and then checked through SPSS to avoid errors. The variables were categorized and codes were assigned. Descriptive statistics used were percentages, frequencies, standard deviations of the assigned variables. One tailed T-test was used to examine the Knowledge, Attitude and Practices of mothers for child nutrition.

Results and Discussion

The results of the study were as follows

In table 1 results revealed that majority (40.8%) of the respondents belonged to age group of 26-35. Regarding family type more than half of respondents (50.8%) were having nuclear family and 49.2 per cent had joint type of family. Almost 100 per cent of respondent’s annual family income was below 3-6 lakh and were categorised in the lower income group. Around (33.3%) of respondents had primary school education, 15.8 and 18.3 per cent were having middle and secondary school education respectively. Whereas 15 per

cent respondent’s mothers were illiterate and 8.3 and 1.7 per cent respondent’s mothers were graduated and did post-graduation respectively. It was observed that half of the respondents 50.8 per cent had two number of children. While 31.7 per cent of mother respondents had only one child.

Tables are as follows

Table 1: Background information of the participants (N=120)

S. No.	Background information	Category	Total	
			f	%
Personal factors				
1.	Age	18-25	48	40.0
		26-35	49	40.8
		36-45	23	19.2
2.	Type of family	Nuclear	61	50.8
		Joint	59	49.2
3.	Education qualification	Illiterate	18	15.0
		Primary	40	33.3
		Middle	19	15.8
		Secondary	22	18.3
		Senior secondary	9	7.5
		Graduation	10	8.3
4.	Number of children	1	38	31.7
		2	61	50.8
		3	16	13.3
		4	4	3.3
		5	1	0.8

KAP Assessment of mother of respondents

To assess the knowledge, attitude and practices of mother towards child nutrition, the developed tool was divided into three sections, knowledge towards eating pattern, attitude towards eating pattern and practices followed by mother to overcome malnutrition. which had a set number of questions related to the topic of assessment.

Assessment of knowledge of mothers towards eating pattern

In this section, knowledge of selected mother respondents of pre-school children was tested using KAP questionnaire which has statements related to knowledge of mothers regarding food and food groups, balance diet, Anganwadi nutrition and services and their level of awareness towards their child’s recommended food and dietary allowances for particular age group. The results from the study are presented below in table 2.

According to the results obtained from the research, A total of 99.16% of respondents were aware of healthy food choices affecting children nutritional status. This is in accordance with the study conducted by Babar *et al.* (2010) [1] which suggests that mother’s education appears to be the important underlying factors responsible for poor health status of children from low socioeconomic class.

Table 2: Overall score of Knowledge of respondents towards eating pattern (N=120)

S. No.	Category	Frequency (f)	Percentage (%)	Mean ± SD	t-value
1	Yes	78	65	81.2831±8.41154	105.856
2	No	25	20.83		
3	Maybe	17	14.16		

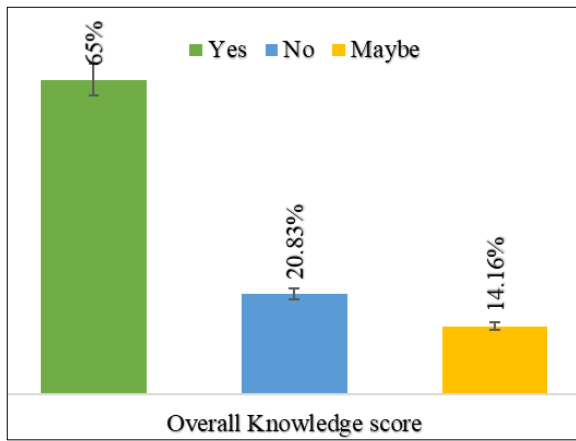


Fig 1: overall knowledge score (N=120)

Assessment of attitude of mothers towards eating pattern

Attitude of selected mothers of pre-school children of Anganwadi centres was tested using KAP questionnaire in which statements related to attitude opted by mothers towards healthy eating, food habits of children and choice of eating junk foods and their attitude towards preparation of food according to their child likes and dislikes. Table 3 present data which reflects the frequency and percentage of responses

Table 3: Overall score of Attitude of respondents towards eating pattern (N=120)

S. No.	Category	Frequency (f)	Percentage (%)	Mean ± SD	t-value
1	Strongly disagree	11	9.16	78.3250±5.22303	164.274
2	Disagree	7	5.83		
3	Don't know	5	4.16		
4	Agree	28	23.33		
5	Strongly agree	69	57.5		

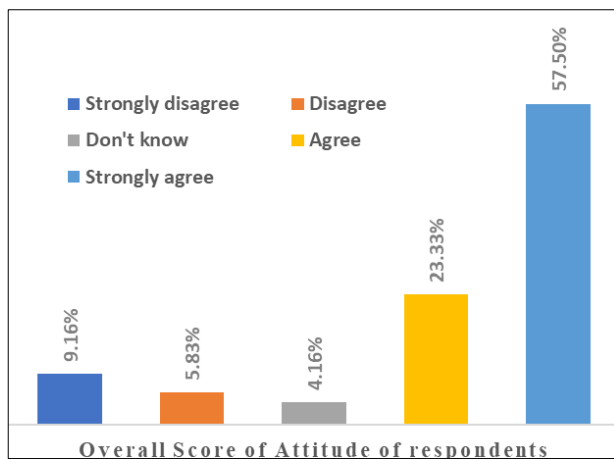


Fig 2: Overall score of attitudes of respondents (N=120)

Assessment of practices followed by mothers to overcome malnutrition

In the section of practices followed by mothers of pre-school children of Anganwadi centres belonging to the age group of 3-6 years is assessed by using the KAP questionnaire which has statements related to practices followed by mothers to identify and overcome malnutrition among children through proper diet and balance nutrition, hygiene practices of mothers while preparing and cooking a meal for children of particular age group and the obtained results is shown in table 3 below. Data indicates 100 per cent of respondents following the practice of washing fruits and vegetables before cooking

of respondents for particular statements and are explained below.

It indicates that 86.7 and 83.3 per cent of respondents disagreed with the statement that consumption of overnight food is safe for child's health and with the attitude of preferring processed food over a weekend respectively.

It also shows 90 per cent of respondent's children were consuming milk every day. Around 98.3 per cent of respondents strongly agreed with the attitude of children eating their food while watching television or smart phone. it also indicates that 30.8 per cent of respondents were not even aware of the attitude of overcooking of vegetables which can alter the nutrient requirements. The observed data was significant at 5% level of significance.

Overall score of the attitude towards about eating pattern:

According to the data, it can be concluded that maximum respondents had good attitude towards eating pattern and food habits of children. The Mean ± SD for attitude section was 78.3250±5.22303. which shows that out of 120 respondents, 78.32 was mean of obtaining the desired response i.e. strongly agree from the respondents through survey.

and eating and 55 per cent of mothers never search for trying different healthy food recipes for their child. It also shows that 95.8 per cent of respondents had a preference of eating fried foods at home rather than from market. 80 per cent of mothers ensures that their child is having breakfast regularly. Whereas, 6.7 per cent of respondent's children had frequency of never eating junk food. 51.7 and 48.3 per cent of mothers reveals that their child was always willing to eat fruits and vegetable at home respectively. Also 80.8 per cent of mothers always focused on adding more green vegetable in the diet of their child.

The overall frequency of getting always as a response from mother was 50.19 with a standard deviation of 7.49. it indicates that approximately half of the sample had good practices to overcome child malnutrition and following healthy food eating habits which is significant at (p<0.05).

Overall score of practices followed by respondents:

As shown in table 4, the mean of practices followed by respondents was 50.1930 with a standard deviation of 7.495, which indicates that out of 120 respondents, 50.193 was mean of obtaining "Always" as desired response from the respondents during this study.

It can be concluded that half of the respondents had good practices followed by them in identifying and overcoming malnutrition among children through proper diet and balance nutrition and were following good hygiene practices while preparing and cooking a meal for their child.

Table 4: Overall score of Attitude of respondents towards eating pattern (N=120)

S. No.	Category	Frequency (f)	Percentage (%)	Mean ± SD	t-value
1	Always	42	35	50.1930±7.49555	73.355
2	Sometimes	12	10		
3	Often	20	16.66		
4	Occasionally	17	14.16		
5	Never	29	24.16		

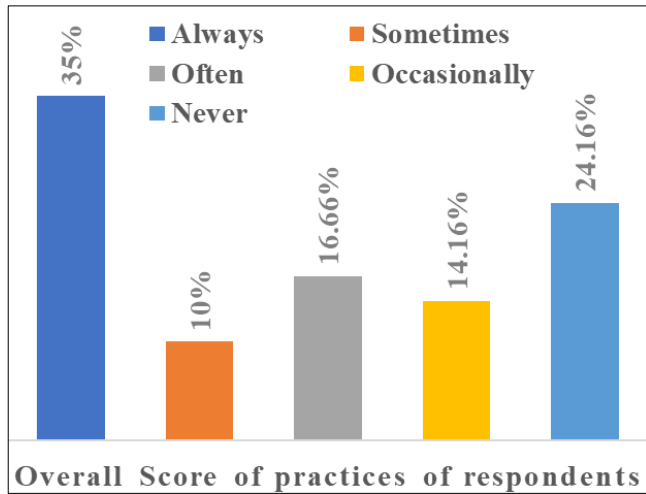


Fig 3: overall score of practices of respondents (N=120)

Summary

The results revealed that majority (40.8%) of the respondents belonged to age group of 26-35. Regarding family type more than half of respondents (50.8%) were having nuclear family and 49.2 per cent had joint type of family. Almost 100 per cent of respondent’s annual family income was below 3-6 lakh and were categorised in the lower income group. Around (33.3%) of respondents had primary school education, 15.8 and 18.3 per cent were having middle and secondary school education respectively. Whereas 15 per cent respondent’s mothers were illiterate and 8.3 and 1.7 per cent respondent’s mothers were graduated and did post-graduation respectively. It was observed that half of the respondents 50.8 per cent had two number of children. While 31.7 per cent of mother respondents had only one child.

For assessing Knowledge, Attitude and Practices of selected mothers of pre-school children of Anganwadi centres. Pre-testing was done using KAP tool and based on the respondents of pre-testing desirable changes were made in KAP tool. After pre-testing, the information was collected according to the statements on Knowledge of respondents on eating pattern of children, Attitude and Practices to overcome malnutrition. Total three sections were made in which close ended statements. Which was then assessed on the basis of overall scores of respondents.

Overall score of Knowledge of mothers revealed that 65 per cent of respondents had good level of knowledge about the food and food groups and were aware of health complications of unhealthy food choices. Whereas 20.83 and 14.6 per cent had poor knowledge levels. It was discovered that overall score of Attitude of mothers in keeping their child healthy was substantially good. As 57.5 per cent strongly agreed and 23.33 per cent of respondents agreed to good attitude towards child eating pattern and following healthy diet. Results of overall score of Practices followed by mother respondents to identify and overcome malnutrition revealed that around 35 per cent of mother always follow good practices and 16.66 per cent of them often follow healthy practices.

The results of survey indicated that respondents had low levels of knowledge about the aspects of growth monitoring at Anganwadi centres, balance diet and different food groups and around 98.3 per cent of mothers had poor attitude towards the statements of children eating while watching television or smart phone. 30.8 per cent of respondents had no idea about the aspect of overcooking of vegetables which can alter nutrient requirements.

After the assessment of Knowledge, Attitude and Practices of mothers of the selected respondents testing was done using KAP tool and then based on their KAP scores, level of inadequate knowledge was recognized and based on this data educational material was developed. Which was presented to mothers separately in different Anganwadi centres.

Conclusion

It can be concluded that malnutrition among pre-school children is still a concerning issue and a major part of this issue is contributed by the lack of education and awareness regarding nutrition among population. From the finding of the current approach, it can be concluded that, even after making new policies and programmes for the growth and development of children by the government, implementation of these programmes lacks everywhere which leads to poor child nutritional status and malnutrition problems.

Knowledge, Attitude and Practices of mothers of Pre-school children enrolled in Anganwadi centres were average. They lack in knowledge of nutritional requirements for their children and had average healthy attitude and practices towards child nutrition. Overall KAP of mothers was not up to the desired level. The nutritional status of pre-school children of Anganwadi centres in this study were found to be quite satisfactory. The presented results indicated that majority of the respondents were in category of normal range of malnutrition.

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