



RESEARCH ARTICLE

Knowledge Regarding Prevention of Malnutrition among School Children

Sushma Kumari , Preeti

Nursing Tutor, Department of Community Health Nursing, SMVDCoN, Kakryal, Katra, India

ABSTRACT

Introduction: Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients. The term malnutrition covers 2 broad groups of conditions. One is 'undernutrition'—which includes stunting (low height for age), wasting (low weight for height), underweight (low weight for age) and micronutrient deficiencies or insufficiencies (a lack of important vitamins and minerals). The other is overweight, obesity and diet-related noncommunicable diseases (such as heart disease, stroke, diabetes, and cancer). Malnutrition affects people in every country. Around 1.9 billion adults worldwide are overweight, while 462 million are underweight. An estimated 41 million children under the age of 5 years are overweight or obese, while some 159 million are stunted and 50 million are wasted. Adding to this burden are the 528 million or 29% of women of reproductive age around the world affected by anaemia, for which approximately half would be amenable to iron supplementation.

Methodology: In this descriptive study, 100 school children from selected schools of district Reasi in the age group of 12-17 years were selected as the samples for the study by using total stratified sampling technique. The data was collected by using self structured knowledge questionnaire on preventive measures of Malnutrition . Data analysis was performed by descriptive statistics and inferential statistics. SPSS-17 software was used and P values less than 0.05 were considered significant.

Result: The findings shows that the majority of children had fair level of knowledge (54%), 24% children had poor level of knowledge, 20% children had good level of knowledge and 2% children had excellent level of knowledge regarding preventive measures of malnutrition.

Discussion: The result shows that out of 100 school children, only 2% of the school children had excellent level of knowledge, 20% of school children had good level of knowledge, 54% of the school children had fair level of knowledge and 24% of the school children had poor level of the knowledge regarding preventive measures of malnutrition which was calculated at 0.05 level of significance.

INTRODUCTION

Malnutrition is a silent emergency. Malnutrition is both undernutrition and over nutrition ranging from severe nutrient deficiencies to extreme obesity. Globally; more than one third of child deaths are attributable to under nutrition. Nutrition plays a key role in physical, mental and emotional development of children and much emphasis has been given to provide good nutrition to growing populations especially in the formative years of life. It is known that good nutrition is a key driver in achieving a satisfactory level of human development. The World Health Organization (WHO) estimated in a recent report that there are 178 million undernourished children in the world, 20 million of whom suffer from severe malnutrition; undernutrition contributing to 3.5 to 5 million annual deaths among children. The monitoring of the goals against hunger set by the Millennium Development Goals ended in 2015 with the goals not having been met. In India, the slow pace of progress in fighting hunger over the years is particularly worrisome. Some factors associated with malnutrition have been identified in the literature. In the global context, food security, mother and child care (fertility rate and maternal literacy), characteristics of the health services and environment, and potential resources (national and domestic income) were factors explaining the variability in the prevalence of malnutrition among children in developing countries.

MATERIALS AND METHODS

A Quantitative research approach was adopted for the study. A descriptive research design was utilized to achieve the objective of the study. The study was conducted in the selected school of district Reasi that was Govt High School Panthal. Researcher's familiarity with setting and availability of required sample were also considered while selecting the study group. The target population is school children with the age group of 12-17 years in the selected school of village Panthal. In the present study 100 sample were selected by using stratified sampling technique. Interview schedule with self structured knowledge questionnaire to assess the knowledge regarding prevention of malnutrition among school children. This section consist of 20 questions to assess the knowledge of students regarding prevention of malnutrition.

Knowledge of subjects was graded as given below.

Level of Awareness	Score
Poor	0-5
Fair	6-10
Good	11-15
Excellent	16-20

Demographic variables were collected by using interview technique. For descriptive research design, demographic variable, self structured knowledge questionnaire was collected. Data was collected from 100 school children with the age group of 12-17 year. After the data collection, informational booklet on preventive measures of malnutrition were provided to the students. Data collection procedure terminated by thanking the students for their co-operation.

RESULT

Demographic variable description

Table 1. Frequency And Percentage Distribution Of Subjects According To Their Socio Demographic Variables

S.No	Socio Demographic Variables	Frequency (F)	Percentage (%)
1.	Age of student		
	12-14	40	40.0%
	14-16	39	39.0%
	16-17	21	21.0%
2.	Gender		
	Male	54	54.0%
	Female	46	46.0%
3.	Father's education		
	No formal education	10	10.0%
	Metric	10	10.0%
	Secondary	27	27.0%
	Graduation	34	34.0%
	POST GRADUATION	19	19.0%
4.	Mother's education		
	No formal education	10	10.0%
	Metric	34	34.0%
	Secondary	23	23.0%
	Graduation	27	27.0%
	POST GRADUATION	06	06.0%
5.	Eating habit		
	Vegetarian	60	60.0%
	Non vegetarian	40	40.0%
6.	Monthly family income		
	Less than 10,000	08	08.0%
	10,001 to 20,000	10	10.0%
	20,001 to 30,000	24	24.0%
	More than 30,000	58	58.0%
7.	Family type		
	Nuclear	64	64.0%
	Joint family	36	36.0%

TABLE 2: Level of awareness regarding preventive measures of malnutrition among the school children.

S.No	LEVEL OF KNOWLEDGE	SCORE	FREQUENCY	PERCENTAGE
1	POOR	0-5	54	54%
2	FAIR	6-10	23	23%
3	GOOD	11-15	16	16%
4	EXCELLENT	16-20	7	7%

TABLE 3: Associate the knowledge score with socio demographic variables.

S.No		POOR		FAIR		GOOD		EXCELLENT		Total	Chi square total
1.	Age										5.17
		f	%	f	%	f	%	f	%		
	14-15	12	25	20	41.6	09	18.7	07	14.5	48	
	15-16	09	26.4	11	32.3	06	17.6	08	23.5	34	
	16-17	03	16.6	05	27.7	04	22.2	06	33.3	18	
	Gender										10.21
2.	Male	28	45.1	18	29.0	10	16.1	06	9.6	62	
	Female	09	23.6	15	39.4	09	23.6	05	13.1	38	
	Father's Education										20.24
3	No formal education	0	0	2	20	3	30	5	50	10	
	Metric	2	20	3	30	3	30	2	20	10	
	Secondary	6	22.2	3	11.1	5	18.5	13	48.1	27	
	Graduation	7	20.5	6	17.6	6	17.6	15	44.1	34	
	Post graduation	3	15.7	2	10.5	5	26.3	9	47.3	19	
	Mother's Education										19.23
4	No formal education	1	10	2	20	2	20	5	50	10	
	Metric	6	17.6	8	23.5	8	23.5	12	35.2	34	
	Secondary	4	14.8	3	11.1	5	18.5	15	55.5	27	
	Graduation	2	8.6	2	8.6	11	47.8	8	34.7	23	
	Post graduation	0	0	1	16.6	2	33.3	3	50	06	
	Eating habit										4.68
5	Vegeterian	24	40	12	20	11	18.3	13	21.6	60	
	Non-Vegeterian	7	17.5	16	40	12	30	05	12.5	40	
	Monthly family income										6.63
6	Less than 10,000	2	25	0	0	3	37.5	3	37.5	08	
	10,001 to 20,000	3	30	1	10	3	30	3	30	10	
	20,001 to 30,000	4	16.6	5	20.8	6	25	9	37.5	24	
	More than 30,000	16	27.5	21	36.2	9	15.5	12	20.6	58	
	Family type										4.42
7	Nuclear	24	39.3	14	22.9	10	16.3	13	21.3	61	
	Joint family	7	17.9	10	25.6	12	30.7	10	25.6	39	

DISCUSSION

The study was conducted using a descriptive research design, subject were selected by stratified sampling technique. The sample size was 100.

The first objective of the study to assess the level of knowledge regarding preventive measures of malnutrition among school children. It revealed that majority 50 % of student had good level of knowledge, 28% of the students had poor level of knowledge, 20% of the students had good level of knowledge and only 2% of the students had excellent level of knowledge.

The second objective of the study was to find out the association with socio demographic variables: It reveal that in relation to age of student, obtained chi-square value (5.17) and the tabulated value (12.59) at statistically significant ($p = 0.05$). So, there is no association between the age of the student with the knowledge regarding preventive measures of malnutrition.

In relation to gender, the obtained chi- square value (10.21) and the tabulated value (8.82) at statistically significant ($p=0.05$). It can be concluded that the tabulated value is less than the calculated value. So, there is an association between the gender of children with the knowledge regarding preventive measures of malnutrition.

In relation to the educational status of father, the obtained chi-square value is (20.24) and the tabulated value (21.03) at statistically significant ($p=0.05$). It can be concluded that the tabulated value is less than the calculated value. So, there is an association between the educational status of father with the knowledge regarding preventive measures of malnutrition.

The educational status of mother, the obtained chi-square value is (19.13) and the tabulated value (21.03) at statistically significant ($p=0.05$). It can be concluded that the tabulated value is more than the calculated value. So, there is no association between the educational status of mother with the knowledge regarding preventive measures of malnutrition.

In relation to eating habits , the obtained chi- square value(4.68)and tabulated value (7.82) at statistically significant ($p=0.05$). It can be concluded that the tabulated value is more than the calculated value. So, there is no association between the eating habits of family with the knowledge regarding preventive measures of malnutrition.

In relation to monthly family income , the obtained chi- square value(6.63) and tabulated value (16.92) at statistically significant ($p=0.05$). It can be concluded that the tabulated value is more than the calculated value. So, there is no association between the income status of family with the knowledge regarding preventive measures of malnutrition

In relation to type of family , the obtained chi- square value (4.42)and tabulated value (7.82) at statistically significant ($p=0.05$). It can be concluded that the tabulated value is more than the calculated value. So, there is no association between the type of family with the knowledge regarding preventive measures of malnutrition.

CONCLUSION

From the findings of the study following conclusion were drawn:

- It was concluded that 23% children had fair knowledge regarding preventive measures of malnutrition. This indicates that children has no awareness regarding preventive measures of malnutrition.
- There is association between demographic gender, educational status of father.

REFERENCES

World Health Organization. Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition. Geneva: WHO; 2013 [accessed in 2019 11 Jan]. Available from: http://apps.who.int/iris/bitstream/10665/84409/1/9789241505550_eng.pdf.

United Nations. Food and Agriculture Organization, International Fund for Agricultural Development, World Food Programme. The state of food insecurity in the world: meeting the 2015 international hunger targets: taking stock of uneven progress. Rome: FAO; 2015 [accessed in 2019 14 Jan]. Available from: <http://www.fao.org/3/a-i4646e.pdf>.

Requejo JH, Bryce J, Barros AJD, Berman P, Bhutta Z, Chopra M, et al. Countdown to 2015 and beyond: fulfilling the health agenda for women and children. *Lancet*. 2015;385:466–76.

Frongillo EA, de Onis M, Hanson KM (1997) socioeconomic and demographic factors are associated with worldwide patterns of stunting and wasting of children. *J Nutr*. 1997;127:2302–9.

World Health Organization. WHO Child Growth Standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development. Geneva: WHO; 2006 [accessed in 2019 14 Jan]. Available from: https://www.who.int/childgrowth/standards/Technical_report.pdf