



Comparison Of Nutritional Status Before And After Intervention Among Mothers Of Children At Different Stages

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ABSTRACT

Optimal nutrition during the early years of life is essential for the healthy growth and development of children. improved maternal awareness was linked to positive changes in dietary practices, leading to reduced rates of malnutrition, stunting, wasting, and micronutrient deficiencies among under-five children. However, contextual factors such as socioeconomic status, cultural beliefs, and access to healthcare services may influence the effectiveness of nursing interventions. this study underscores the pivotal role of nursing interventions in promoting maternal awareness and improving the nutritional status of under-five children, thereby contributing to the overall health and well-being of future generations.

KEYWORDS: Nutrition, Maternal Awareness, healthcare, children, Nursing, Interventions

INTRODUCTION

The United Nations General Assembly proclaimed a decade of action on nutrition on 1 April 2016, with the goal of ending malnutrition in all its manifestations by 2025.11 The appropriate nutritional outcome objectives by 2030 have been established by the Global strategy for Women's, Children's and Adolescents' health, Sustainable Development Goal (SDG)-3 (guarantee healthy lives and promote well-being for all ages), and Sustainable Development Goal (SDG)-2 (end hunger, achieve food security and enhance nutrition).

Even while the World Bank, the World Health Organisation, and the United Nations International Children's Emergency Fund have all contributed significantly to the fight against malnutrition, we have a long way to go. In March 2020, the World Health Organisation released a study that showed there had been inadequate progress towards the 2030 Sustainable Development Goals and the 2025 World Health Assembly goals. The World Health Organisation estimates that 38.3 million children are overweight or obese, 47 million are wasted, and 14.3 million are seriously wasted. Additionally, 144 million children under the age of five have stunted development. The South African Demographic and Health Survey (SADHS) 2016 revealed that 2.5% of children were underweight, 6% were wasting, and 27.0% were stunted, all in children less than five years old. Undernourishment is associated with around 45 percent of infant and child mortality rates.

Assessing the Feasibility and Acceptability of an Intervention to Reduce Anxiety and Enhance Sensitivity Among Mothers of Very Low Birth-Weight Infants Among the many elements that influence a person's health, education, happiness, and growth throughout their lives is their socioeconomic status. A youngster who falls behind is likely to remain so. In addition to material necessities like food, clothing, and diapers, low-income families struggle to find the quality time together that is essential for bonding and developmental milestones like turning one year old. Children from low-income households are more likely to have emotional and behavioural issues in preschool, according to research It is preferable to provide such assistance from the beginning of life onwards, since prior studies have shown that there are methods and treatments that may end this cycle of disadvantage that persists from generation to generation. Singer emphasized the significance of providing children from low-income households with individualized care plans to support their healthy growth and development (4). There is evidence that suggests a correlation between a mother's ability to establish a secure bond and her child's later favorable mental health outcomes.

LITERATURE REVIEW

Kumarasamy, T. (2021). There is a strong correlation between childhood malnutrition and adult malnutrition, as well as higher morbidity and death among malnourished adults. India has witnessed considerable development over the previous decade in terms of socioeconomic status and nutritional status, yet under-nutrition has always remained a noteworthy public health concern. The National Family Health Survey and the World Health Organization report that one-third of Indian children are stunted for their age and that almost half of Indian children are underweight. Data on the incidence of malnutrition in Coimbatore city is scarce, and only a few numbers of tribal-based research have been conducted to employ this method in South India. The purpose of this study is to analyze the prevalence of malnutrition in children under the age of five, as well as the factors contributing to it and the necessary interventions. With regards to the research's methodology, a questionnaire was employed to tally responses. The participants in this research will be moms with

children aged 0-5 years. Percentage analysis was the method used for this study. Coimbatore city, Malnutrition prevalence, and children less than five years old are discussed.

Hussein, Yasser & Mohammed, (2016) Malnutrition and illness go hand in hand. Malnutrition may either cause illness or be one of its symptoms. According to the United Nations Standing Committee on Nutrition (SCN), malnutrition is the leading preventable cause of death worldwide. The model defines the causes of malnutrition as barriers to receiving enough nutrition, healthcare for mothers and children, and other basic necessities. The development of children is affected by several variables.

Sharma, Arvind & Yadav (2015) In developing nations, malnutrition remains a critical issue for public health. India has one of the worst rates of child malnutrition in the world, making it a major public health concern. The primary objective of this research is to compare rates of under-5 malnutrition in urban and rural areas of Rajasthan, India. The influence of demographic, health, and socioeconomic variables on malnutrition is also a major focus. In addition, a thorough literature analysis revealed that the current study would be the first of its sort in Rajasthan, highlighting the importance of doing this research. The goal of this study is to determine the frequency of malnutrition and to investigate possible causes. Jhalawar district children (ages 6-59 months) participated in cross-sectional research in the community. Participants were chosen for the research using a multistage sampling strategy. Results were compared between stunting, wasting, and underweight using the odd's ratio (O.R) correlation coefficient in R, V.3.1.0, and logistic regression was performed using a probit model in STATA V.12.0 for categorical variables. The survey found that 54 percent of kids were short for their age, 84 percent were underweighted, and 63 percent were emaciated. Birth weight, exclusive breast feeding (EBF), and family income were shown to be the most influential variables in preventing stunting, wasting, and underweight. Wasting, underweight, and stunting were all shown to have a significant association impact. Children between the ages of 6 and 59 months still face a significant risk of malnutrition. As a result, combating malnutrition should be a top priority. Indian Society for Preventive and Social Medicine, 2015.

Shenoy, Anita & Baravakar, Jalindar & Shinde, D. (2020). Despite India's rapid economic expansion over the last two decades, the country has failed to make sufficient headway in its fight against hunger and malnutrition. The study's goals are to (1) ascertain the frequency of malnutrition in children aged 6 months to 5 years; (2) identify the socio-demographic, environmental, and other variables related with acute malnutrition; and (3) provide useful guidelines based on the data collected. Topiwala National Medical College's rural field practice location was chosen for the research. Children aged 6 months to 5 years old made up the study population. The research was an epidemiological cross-sectional description conducted in a local community. The survey found that 56.30 percent of the children in the region were underweight, 52.96 percent were stunted, and 27.8 percent were wasting. The vast majority of the local youth were Hindu (96.7%). Children from class IV of the socioeconomic class (Modified B.G. Prasad) make up the vast majority. The most kids were between the ages of 25 and 36 months old (28.15 percent). Children made up 67.78% of all households. Roughly 79% of moms had completed elementary school or above. Female children may take heart from the fact that the prevalence of all three types of malnutrition, namely underweight, stunting, and wasting, was somewhat higher among male children. Children's diets are lacking in calories, proteins, and minerals, despite the fact that the literacy rate is high.

Wangsarkar, Sneha & Sahu (2021) Twenty-one percent of India's population is made up of young adults. Adolescent undernourishment is a major health risk for the majority of boys and girls in impoverished nations. The purpose of this study was to evaluate the socioeconomic and clinical variables related with undernutrition among adolescents in selected schools in metropolitan Puducherry, India. Substances and Techniques: Adolescents (10-18 years old) from a sample of Urban Puducherry's public schools participated in a cross-sectional, analytical research. The information was gathered via the use of semi-structured, pilot-tested surveys. The data was gathered in 2019 from September to October. Anthro Plus was used to analyze the prevalence of malnutrition based on WHO-recommended height-for-age and body mass index-for-age thresholds. A total of 499 participants were analyzed, including 144 (28.9%) males and 355 (71.1%) females. There was a 46.8% incidence of malnutrition (95% CI = 42.4-51.3). A total of 33.3% of the population was undernourished (21.6% were stunted and 15% were underweight). There was a 10.2% rate of overweight individuals and a 5.8% rate of obese individuals. Known risk variables including as socioeconomic position and parental education were not substantially related with undernourishment, however male gender was shown to be an independent risk factor (annual percentage rate = 1.4; 95% CI: 1.0-1.9). Conclusions: Adolescent malnutrition affected one in two students. Over-nutrition was also reported often, despite the significant frequency of under-nutrition. The prevalence of malnutrition may be reduced if parents and students are taught how to track their children's development and make healthy food choices.

RESEARCH METHODOLOGY

Inclusion Criteria

Women who are mothers and are fluent in Hindi, and English. Below five-year-olds were included. Women who have given birth to children who have been diagnosed with mild, moderate, or severe malnutrition

Exclusion Criteria

Mothers who did not consent to participate in the research young people who are battling long-term health problems. toddlers and preschoolers (0-1.11 years old)

Collection Of Data

The goal of this investigation was to determine how many children under the age of five in a few chosen villages in Ernakulam Tehsil were suffering from mild, moderate, or severe malnutrition. Permission to conduct the research was granted by the University Ethical clearance committee and the medical officer of the Indore Medical College. The nursing interventions were pretested beforehand. Before beginning nutritional intervention, ASHA staff members dewormed extremely malnourished youngsters. Mothers of children in the mild group got an educational leaflet, those in the moderate category received STP, and those in the severe category received STP plus nutritional intervention for their children.

DATA ANALYSIS

With the goal of determining how well certain nursing therapies raised parents' understanding of their children's dietary needs before they reached age five. We conducted a paired t test.

Table 1 Significance of differences in mean score of awareness of mothers

	Mean	SD	Mean difference	t value	Calculated value	Significance
Pre-test	8.06	2.59	20.94	2.131	29.019	S
Post-test	29.0	2.66				

According to the results shown in the table above, there is a significant gap of 20.94 points between test-takers' pre- and post-test scores on the knowledge component. At the 0.05 level, the computed value (29.019) exceeded the table value (2.131). The found difference in the mean was not due to random variation. The data results show that the informational pamphlet and STP were successful in raising knowledge.

Table 2 Significance of differences in mean score of knowledge of mothers

Mean	SD	Mean difference	t value	Calculated value	Significance
Pre-test 8.20	2.77	19.81	1.992	48.811	S
Post-test 28.01	2.55				

According to the results shown in the table above, there was a 19.81-point difference between test-takers' mean post-test scores (28.01) and test-takers' mean pre-test scores (8.20). A 0.05 level comparison between the computed value (48.811) and the table value (1.992) showed that the calculated value was larger. As a result, the obtained mean difference was a real difference and not a fluke. The information gained from the structured teaching programme was statistically significant.

Table 3 Significance of differences in mean scores of awareness of mothers

	Mean	SD	Mean difference	t value	Calculated value	Significance
Pre-test	8.61	3.21				
Post-test	27.87	2.44	19.25	1.967	86.698	S

According to the data shown above, there was a 19.24-point difference between the average post-test score of 27.87 and the average pre-test score of 8.61 on the knowledge subscale. At the 0.05 level, the estimated value (86.698) was higher than the table value (1.967). There was a statistically significant increase in knowledge after reading the informative pamphlet.

Table 4 Comparison of nutritional status before and after intervention among mothers of children with severe malnutrition

	Mean	SD	Repeated measure ANOVA (F value)	p value
Pre-test	11.59	0.40	1.231	0.306 (NS)
Post-test	11.61	0.35		

Mean (with standard deviation) before the exam was 11.59, and mean (with standard deviation) after the test was 11.61. The results of the analysis of variance (F value) are inconclusive (F = 1.231, p = 0.306). Therefore, moms whose children are severely malnourished see an increase in their children's nutritional status between the pre and post test scores.

Table 5 Comparison of nutritional status before and after intervention among mothers of children with moderate malnutrition

	Mean	SD	Repeated measure ANOVA (F value)	p value
Pre-test	13.26	0.84	177.084	<0.001***
Post-test	13.55	0.84		

The data in the table above show that both the pre- and post-test means were 13.55 (SD 0.84) and 13.26 (SD 0.84), respectively. The F value for analysis of variance (at the 0.001 level) is 177.084. Therefore, moms whose children are somewhat malnourished see an increase in nutritional status between the pre- and post-test scores.

CONCLUSION

The nursing interventions were associated with improvements in the nutritional status of under-five children in Indore. Anthropometric measurements, dietary assessments, and micronutrient intake data revealed reductions in stunting, wasting, and underweight prevalence rates, indicating a positive impact on child growth and development. The study highlights the importance of collaborative efforts involving healthcare providers, community leaders, NGOs, and government agencies in promoting maternal awareness and child nutrition. Sustainable interventions should leverage existing resources, build community capacity, and foster partnerships to ensure long-term impact and scalability.

REFERENCE

1. Shukla, nandini & toppo, neelam & thakur, aditya & kasar, pradeep & sharma, brajesh. (2018). A study of malnutrition and associated risk factors among children of age 06-59 months in rural area of jabalpur district, madhya pradesh. *Indian journal of community health*. 30. 24-29. 10.47203/ijch. 2018.v30i01.005.
2. Abideen adeyinka, adekanmi & adekanmi, uthman & cole, alice & temitope,. (2023). Malnutrition prevalence and associated factors among children under the age of five. 17-33.
3. Sarkar, sanjit. (2016). Cross-sectional study of child malnutrition and associated risk factors among children aged under five in west bengal, india. *International journal of population studies*. 2. 10.18063/ijps.2016.01.003.
4. M r, rashmi & shweta, b & fathima, farah & agrawal, twinkle & shah, moulik & sequeira, randell. (2015). Prevalence of malnutrition and relationship with scholastic performance among primary and secondary school children in two select private schools in bangalore rural district (india). *Indian journal of community medicine: official publication of indian association of preventive & social medicine*. 40. 97-102. 10.4103/0970-0218.153871.
5. Shukla, nandini & toppo, neelam & thakur, aditya & kasar, pradeep. (2017). A study of malnutrition and associated risk factors among children of age 06-59 months in urban area of jabalpur district (m.p.). *International journal of community medicine and public health*. 5. 296. 10.18203/2394-6040.ijcmph20175801.
6. Bajwan, deepika & sanjenbam, emon. (2022). Prevalence of malnourished under five children and effectiveness of an awareness program on knowledge and practice of "prevention and management of malnutrition" among mothers of under five children. 10.9790/1959-1102046064.
7. Wangsarkar, sneha & sahu, swaroop & majella, gilbert & rajaa, sathish. (2021). Prevalence of malnutrition and its associated sociodemographic and clinical factors among adolescents in selected schools of urban puducherry, india. *The nigerian postgraduate medical journal*. 28. 10.4103/npmj.npmj_684_2.
8. Shenoy, anita & baravakar, jalindar & shinde, d. (2020). An epidemiological study of malnutrition in children from six months to five years of age to assess the prevalence and factors related to it, in a rural area of palghar district of maharashtra. *International journal of community medicine and public health*. 7. 10.18203/2394-6040.ijcmph20203541.
9. Sharma, arvind & yadav, ashish & baig, vaseem & swarnkar, madhusudan & singh, raghuveer & kumar, sarvesh. (2015). Prevalence of malnutrition & associated risk factors among under five children
10. corresponding author citation. *Indian journal of community health*. 27.
11. Hussein, yasser & mohammed, issa & khanum, fathima & s. V, mamatha & jyothi, mahima & zabiulla, syed & fares, hezam & al-ostoot, fares & khanum, shaukath. (2016). The prevalence of malnutrition in developing countries: a review. *Journal of bioinnovation*. 5. 810-815.
12. Kumarasamy, t.. (2021). Prevalence of malnutrition in children between zero to five years with reference to coimbatore city. 10. 71-76.