



NAVIGATING NUTRITIONAL CHALLENGES: AN ASSESSMENT OF SPECIAL EDUCATORS' KNOWLEDGE AND CONFIDENCE IN FEEDING CHILDREN WITH DEVELOPMENTAL DISABILITIES IN KASARGOD DISTRICT.

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ABSTRACT

Aim And Objective: In India, a rising prevalence of feeding difficulties among children with developmental disabilities necessitates bolstering knowledge and confidence among healthcare professionals. In Kerala's rural context, special educators, instrumental in rehabilitating these children, must be adequately equipped. so our study is to assess the knowledge and confidence of special educators in Kasaragod district concerning feeding children with developmental disabilities. **Method:** A cross-sectional pilot study was executed involving 30 special educators. A purpose-designed questionnaire, validated by five speech-language pathologists, was disseminated online. It evaluated feeding knowledge across domains (General, Environment Modification, Food Textures, Position, and aspiration) and provided confidence. Data were analyzed using SPSS version 29.0.10. **Summary And Conclusion:** Special educators in Kasaragod district display a commendable breadth of feeding knowledge across multiple domains. However, a palpable confidence deficit exists when providing children with developmental disabilities. The strong interrelationship between the different knowledge domains indicates an integrated understanding. Continuous hands-on training is recommended to enhance educators' confidence, which can significantly impact the care they provide when complemented with their existing knowledge.

KEYWORDS : Developmental disability, feeding difficulties, special educator, knowledge and confidence

INTRODUCTION

Early impairments in a person's physical, cognitive, or behavioral functioning can result in a variety of chronic conditions collectively referred to as developmental disabilities. Children with severe developmental disabilities face numerous challenges when it comes to functioning and participating in daily activities. Research has shown that malnutrition affects up to 90% of non-ambulatory children with cerebral palsy.^[1] Feeding and nutritional issues are common in patients with developmental disabilities. Although diverse factors certainly contribute to these startling and disturbing observations, feeding disorders have been observed in a high percentage of children with major motor and cognitive disabilities. Failure to assess and treat these problems in a timely fashion not only hastens the onset of significant nutrient deficits, but also heightens the incidence of complications, increase the hospitalization rates and results in impaired quality of life. Feeding difficulties are common in children with developmental disabilities like intellectual disability and autism spectrum disorders.^[2] They also tend to begin subtly and are under recognized in such children.^[3]

Children with severe developmental disabilities face numerous challenges to function and participate in activities of daily life. One of the most significant challenges to accomplishing this goal is that of oral feeding disorders. It is estimated that among children with developmental disabilities, up to 80 to 90% present with some level of feeding disorders. In addition, it has been shown that as the level of severity of intellectual disability increases, so does the severity of the oral feeding disorders. The consequences of feeding difficulties are more for countries like India, where child mortality and malnutrition in children with developmental disabilities are higher in comparison to other countries.^[4] The feeding disorders in population vary greatly. Due to broad range of etiologies which result in developmental disabilities.

The prevalence of feeding issues in children worldwide varies between 25–45% for children without disabilities and 33–80% for those with disabilities.^[5] Aspiration and choking [6], lung infections [7], delays in the development of feeding skills [8], stress on families, and prolonged mealtimes [9] are further consequences of feeding difficulties. The stigma associated with disabilities exacerbates the emotional and financial strain that a lack of resources, equipment, and services can place on families, communities, and individuals [10].

In the awake of increasing prevalence of feeding difficulties in developmental disability in India, it is essential to update the knowledge and confidence of health care professional who are involved in this process. In the scenario of rural areas in Kerala, special educators also play a key role in the rehabilitation of developmental disability children; hence it is important to assess their knowledge and confidence.

This study is to evaluate the level of knowledge and confidence of the special educators across Kasaragod district who are involved in feeding children with developmental disability.

MATERIALS & METHOD:

This was a questionnaire based pilot study conducted on special educators who were working with children with developmental disability and feeding difficulties across Kasaragod district. The questionnaire was self-designed specifically for the study. This was sent to 5 speech language pathologists for validation. Comments and suggestions for modifications that were received were incorporated into the final version of the questionnaire. This was sent as online google forms to the special educators for data collection. Convenience sampling was used; to select the participants and the study population was thirty in number.

The questionnaire consisted of two parts (1) knowledge about feeding children with developmental disability (General,

environmental modification, food texture, positioning & aspiration) and (2) confidence during feeding. The questionnaire also collected the demographic information like their age, gender, educational qualification, experience, and the work setting. The whole questionnaire is rated using five point Likert scale, 1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree.

Data were represented and statistically analyzed by using the SPSS software (SPSS Inc.; Chicago, IL) version 29.0.10. The collected data were summarized by using the Descriptive Statistics, frequency, percentage, mean and standard deviation. The One-way ANOVA was used to compare knowledge and confidence according to years of experience. To find the relationship between the various domain of knowledge and confidence, the Pearson correlation coefficient R was used. The p value < 0.05 was considered as significant.

RESULTS

One-way ANOVA was used to compare knowledge and confidence according to years of experience. There was no difference (p 0.835) in knowledge and confidence according to years of experience. [Table 1]

Table 1: Comparison Of The Knowledge And Confidence According To Years Of Experience.

Cumulative score	0 to 2		3 to 6		6 to 10		Above 10		"F"	p-value
	Mea	S.D.	Mea	S.D.	Mea	S.D.	Mea	S.D.		
General	27.83	2.23	27.30	2.16	27.00	2.77	26.71	2.36	0.26	0.852
Environment modification	17.00	1.55	16.10	1.46	15.14	1.46	16.57	1.62	2.42	0.089
Food textures	15.67	0.52	15.90	1.91	14.57	2.44	16.43	1.81	1.26	0.310
Position and aspiration	25.83	1.47	26.80	2.10	26.57	2.57	25.86	1.21	0.50	0.688
Confidence	7.00	1.55	7.10	1.45	7.29	1.50	7.14	1.46	0.04	0.988
Overall	93.33	4.46	93.20	5.87	90.57	9.27	92.71	4.99	0.29	0.835

(*F = One-way ANOVA)

Knowledge about feeding difficulties in developmental disabilities was positively correlated ($p < 0.05$) with general knowledge, environment modification, food textures, position and aspiration, confidence, and overall score. The positive correlation shows adequate knowledge among special educators whereas the positive correlation in confidence shows a poor confidence level in feeding children with developmental disability. [Figure 1]

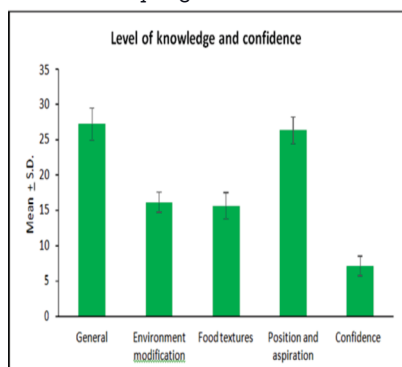


Figure 1:

DISCUSSION:

Feeding difficulty is one of the associated problems seen in developmental disability. As a crucial member in the rehabilitation of developmental disability children, special educators need a general awareness in the area of feeding these children. In the absence of an adequate number of SLPs, there is a need for special educators to monitor the children's mealtimes. As they play a vital role in the everyday life of the child, it is important to assess their confidence in handling this population.

Based on the findings of this study, it was seen that the special educators have adequate knowledge of feeding children with developmental disability. Even so, there is a need to evaluate the subcategories, like general knowledge, environmental modification, food textures, position, and aspiration, in detail. Though they possess adequate knowledge of feeding, they lack confidence. Knowledge and confidence should go hand in hand to properly care for such children. Therefore special educators must receive adequate hands-on training to increase their level of confidence which in turn will address the nutritional challenges faced by the children with developmental disability.

CONCLUSION:

Special educators in Kasaragod district display a commendable breadth of feeding knowledge across multiple domains. However, a palpable confidence deficit exists when providing children with developmental disabilities. The strong interrelationship between the different knowledge domains indicates an integrated understanding. Continuous hands-on training is recommended to enhance educators' confidence, which can significantly impact the care they provide when complemented with their existing knowledge.

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