

Research Article

Caregivers' Nutritional Awareness and its Impact on Pediatric Health Outcomes: A Study at Wad-Albasheir Health Center, Sudan

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Abstract

Background: Nutritional awareness among caregivers plays a crucial role in ensuring optimal pediatric health and development. This study assesses the level of nutritional awareness among caregivers and examines its association with demographic factors.

Objectives: This study aimed to assess the knowledge and awareness of caregivers regarding dietary advice and complementary feeding for children under five years at Wad-Albasheir Family Health Center, Um-Bada locality.

Methods: A cross-sectional study was conducted among caregivers in selected healthcare facilities. Data were collected using a structured questionnaire and analyzed using SPSS version 23. Descriptive statistics and chi-square tests were used to evaluate associations between variables.

Results: The majority of caregivers demonstrated moderate awareness (60%), while 22.5% had low awareness and 17.5% had high awareness. A significant association was observed between education level and awareness ($p < 0.05$). Employment status also influenced awareness levels, with employed caregivers showing higher knowledge scores.

Conclusion: Nutritional awareness is a key determinant of pediatric health. Strengthening educational programs targeting caregivers can improve child nutrition outcomes.

More Information

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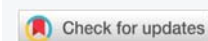
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Keywords: Caregivers' nutritional awareness; Pediatric nutrition; Dietary advice; Complementary feeding; Under-five children; Sudan; Public health; Socioeconomic factors



Introduction

Proper nutrition is essential for child growth and development. Malnutrition—including both undernutrition and overnutrition—remains a significant public health concern. Caregivers' knowledge and practices regarding pediatric nutrition directly impact children's dietary habits and overall health.

Several studies highlight that caregivers with higher educational attainment and socioeconomic status tend to have better nutritional knowledge. However, disparities exist, necessitating targeted interventions to bridge awareness gaps.

This study aims to assess the level of nutritional

awareness among caregivers and analyze its correlation with demographic factors such as education and employment status.

Materials and methods

Study design

A cross-sectional study was conducted involving caregivers who attended pediatric healthcare services. Participants were randomly selected, and informed consent was obtained prior to data collection.

Study area

The study was conducted at the Wad-Albasheir Family Health Center in Hara 52, South Um-Bada, Khartoum State.



Study duration

The study was conducted between September 2019 and January 2020.

Study population

The study targeted all caregivers of children under five years old attending Wad-Albasheir Family Health Center.

Inclusion criteria

- Caregivers of children under five years old.

Exclusion criteria

- Caregivers of children older than five years.
- Caregivers unwilling to participate in the study.

Data collection instruments

A structured questionnaire was administered, covering demographic details, nutritional knowledge, attitudes, and practices. Ethical approval was secured from the institutional review board, and all participants provided informed consent.

Data analysis

Data were analyzed using SPSS software version 23. Descriptive statistics were used for demographic variables, and chi-square tests assessed the association between education level and awareness ($p < 0.05$ was considered statistically significant).

Results

Demographic characteristics of participants (Table 1).

Nutritional Awareness Levels among Caregivers (Table 2).

Statistical Association between Education and Nutritional Awareness (Table 3).

A statistically significant correlation was observed between caregivers' education level and their awareness of pediatric

Table 3: Statistical Association Between Education and Nutritional Awareness

Variable	Frequency (n)	Percentage (%)
Age Group		
18-25 years	50	25%
26-35 years	80	40%
36-45 years	45	22.5%
46+ years	25	12.5%
Education Level		
No formal education	30	15%
Primary education	50	25%
Secondary education	70	35%
Higher education	50	25%
Employment Status		
Employed	85	42.5%
Unemployed	115	57.5%

nutrition ($p < 0.05$). Caregivers with higher education levels exhibited a greater understanding of balanced diets and nutritional requirements.

Discussion

This study highlights the essential role of caregiver education in shaping pediatric nutritional awareness. Our findings indicate that caregivers with higher educational attainment exhibit significantly greater awareness regarding proper child nutrition. This finding aligns with previous research that shows a direct relationship between education and nutritional knowledge [1,2]. Educated caregivers are more likely to understand the importance of balanced diets and implement appropriate feeding practices [3].

Employment status also emerged as a key determinant of nutritional awareness. Employed caregivers demonstrated higher knowledge scores compared to unemployed caregivers, possibly due to greater exposure to health-related information at workplaces [4]. Studies have shown that employment increases access to healthcare resources and enhances awareness of child nutrition [5].

Despite these positive findings, a significant portion of caregivers (22.5%) exhibited low nutritional awareness. This gap underscores the need for targeted interventions to improve caregiver knowledge, particularly those with limited formal education [6]. Public health campaigns should prioritize delivering accessible nutrition education programs through community-based initiatives and digital platforms [7].

Healthcare professionals play a crucial role in enhancing caregivers' awareness. Previous studies have demonstrated that structured counseling sessions during pediatric visits significantly improve nutritional knowledge and dietary habits [8]. Implementing similar strategies in routine healthcare settings may yield substantial improvements in child health outcomes. Future research should explore the long-term impact of caregiver education programs on pediatric nutrition and overall well-being.

Table 1: Demographic Characteristics of Participants .

Education Level	Low Awareness (n/%)	Moderate Awareness (n/%)	High Awareness (n/%)	p - value
No formal education	20 (66.7%)	10 (33.3%)	0 (0%)	< 0.05
Primary education	15 (30%)	25 (50%)	10 (20%)	< 0.05
Secondary education	10 (14.3%)	50 (71.4%)	10 (14.3%)	< 0.05
Higher education	0 (0%)	35 (70%)	15 (30%)	< 0.05

Table 2: Nutritional Awareness Levels among Caregivers.

Awareness Level	Frequency (n)	Percentage (%)
Low Awareness	45	22.5%
Moderate Awareness	120	60%
High Awareness	35	17.5%



Conclusion

Nutritional awareness significantly impacts child health outcomes. Educational level and employment status are crucial determinants of caregivers' knowledge regarding pediatric nutrition. Enhancing awareness campaigns and integrating nutritional education into routine healthcare visits may significantly improve child health outcomes.

Ethical considerations

Ethical approval was obtained from the Ministry of Health and the Institutional Review Board of UMST. Participants were informed about the study objectives, and informed consent was obtained. Confidentiality and anonymity were ensured.

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