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Parent's Information Toward Physical Development of Toddlers in Rania City

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Abstract

Objective: This study aims to evaluate parents' knowledge regarding toddlers' physical development in primary healthcare settings in Rania City, Kurdistan.
Methodology: A descriptive cross-sectional study was conducted in two primary healthcare centers in Rania City from November 1, 2021, to September 1, 2022. 120 parents were interviewed to assess their understanding of normal toddler development. Data were collected using a structured questionnaire validated by experts and analyzed using SPSS version 26.0.
Results: The findings revealed that 44% of fathers were illiterate, while 34% had completed primary education. Most mothers (85.2%) were housewives, and 26.7% had completed secondary education. Significant correlations were found between mothers' educational levels, occupational status, and fathers' number of children with the parents' knowledge of toddler physical development. Higher maternal education and employment status were associated with better knowledge of developmental milestones.
Conclusion: The study concludes that maternal education, occupation, and family size significantly influence parental knowledge of toddler physical development. Targeted educational interventions and support programs are recommended to enhance parental understanding and promote the healthy development of children.

What is already known about the topic? It is known that parents play a crucial role in the physical development of toddlers, yet their knowledge and practices may vary. In Rania City, as in many areas, parents may lack awareness of key factors like nutrition, physical activity, and developmental milestones, which are essential for healthy growth during early childhood. Educating parents can improve toddlers' physical development outcomes.

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INTRODUCTION

The early years of a child's life are crucial for their overall development, particularly during the toddler stage, which spans from one to three years. This period is marked by rapid physical, cognitive, and emotional growth, laying the foundation for a child's future health and well-being. It is essential for parents to actively engage in their children's development during this formative stage to ensure that all aspects of growth are appropriately monitored and supported.

However, challenges often arise due to a lack of knowledge or insufficient awareness among parents regarding the critical milestones of toddler development. This can result in missed opportunities to address developmental delays or issues early on. Mothers, who typically interact most with their children, play a pivotal role in observing and nurturing their children's growth. Their understanding of developmental processes, from infancy through early childhood, is influenced by genetic and environmental factors (Ismawati et al., 2020).

The "golden years" or "window of opportunity" during the first three years of life are irreplaceable, as they set the stage for a child's future abilities in areas such as motor skills, language acquisition, social interactions, and emotional regulation (Andrew et al., 2018). During this time, the primary nervous system undergoes significant development, impacting various bodily functions and cognitive abilities, including speech, emotional development, and socialization (Russell & Russell, 2018).

Given the importance of this developmental stage, it is crucial to assess and enhance parental knowledge regarding toddler growth. Understanding the factors that influence parental awareness, such as education level, occupation, and number of children, can provide valuable insights into better supporting parents in their role as primary caregivers. This study seeks to evaluate parents' knowledge in Rania City regarding their toddlers' physical development, aiming to identify gaps in understanding and potential areas for intervention.

AIM OF THE STUDY

The study aimed to assess mothers' knowledge regarding cerebral palsy of their children attending the chronic disease unit of Dr Jamal Ahmad Rashid Pediatric Teaching Hospital in Sulaimani City.

METHOD

Study Design

This study used a quantitative, descriptive, cross-sectional design to evaluate parents' knowledge of toddlers' physical development. The research was conducted in two primary healthcare centers in Rania City, Kurdistan, from November 1, 2021, to September 1, 2022.

Study Population and Sampling

The study population consisted of parents with toddlers who attended the selected primary healthcare centers during the study period. A total of 120 parents were interviewed. The sample was selected using a convenience sampling technique, ensuring that the

study included a diverse range of socio-demographic backgrounds.

Data Collection Instruments

A structured self-report questionnaire was developed for data collection. The questionnaire was divided into two sections:

- **Section I**: This section collected socio-demographic information from the parents, including age, gender, education level, occupation, and number of children.
- **Section II**: This section assessed parents' knowledge of normal physical development in toddlers, focusing on critical developmental milestones.

The content validity of the questionnaire was established through a panel of experts in the field of pediatric nursing and child development, who reviewed and provided feedback on the instrument.

Ethical Considerations

Before the commencement of the study, approval was obtained from the College of Nursing at the University of Raparin and the Rania Health Directorate. Detailed information about the study's objectives, methods, and potential benefits was provided to the participants, and informed consent was obtained from all respondents.

Data Collection Procedure

Data were collected through face-to-face interviews conducted at the primary healthcare centers. Each interview was conducted in a private setting to ensure the confidentiality and comfort of the participants. The interviews were conducted by trained researchers familiar with the study's objectives and procedures.

Data Analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 26.0. Descriptive and inferential statistical methods were employed to achieve the study's objectives. Descriptive statistics, such as frequencies and percentages, were used to summarize the socio-demographic characteristics of the sample. Inferential statistics, including chi-square tests, examined the relationships between socio-demographic variables and parents' knowledge of toddler physical development.

RESULTS

The study involved 120 parents, primarily from urban areas (99.2%), with a nearly even distribution of male (56.7%) and female (43.3%) children. Most children were aged 12-18 months (52.5%), followed by those aged 24-36 months (29.2%), with a smaller proportion aged 18-24 months (18.3%). The socio-economic status of the families varied, with 56.7% reporting barely sufficient income, 40.8% indicating sufficient income, and 2.5% experiencing insufficient income. The parents' educational levels differed significantly, with 44% of fathers being illiterate, 34% having completed primary school, 16.7% having finished secondary school, and 5.3% possessing higher education. Among the mothers, 26.7% had secondary education, 22.5% had college or postgraduate degrees, 14.2% had primary education, and 13.3% were

illiterate. Occupationally, 66.7% of fathers were employed, while 85.2% of mothers were homemakers.

The study found significant correlations between socio-demographic characteristics and parents' knowledge of toddler physical development. Specifically, higher levels of maternal education were strongly associated with greater certainty regarding their children's physical development across all age groups (12-18 months, 18-24 months, and 24-36 months). Additionally, employed mothers demonstrated a higher level of knowledge about physical development than homemakers, particularly in the 12-18 month and 24-36 month age groups. Furthermore, the number of children in a family significantly influences parents' knowledge, with a complex relationship that suggests a need for further exploration. These findings underscore the importance of maternal education, employment, and family size in shaping parental knowledge of child development.

Table 1. Socio-Demographic Characteristics of the Study Sample (N = 120)

Variable	Category	(n)	(%)
Child's Age	12-18 months	63	52.5
	18-24 months	22	18.3
	24-36 months	35	29.2
Child's Gender	Male	68	56.7
	Female	52	43.3
Residency	Urban	119	99.2
	Rural	1	0.8
Economic Status	Sufficient	49	40.8
	Barely sufficient	68	56.7
	Insufficient	3	2.5
Number of Children	1-2	52	43.3
	3-4	59	49.2
	5-6	8	6.7
	7-8	1	0.8
Father's Educational Level	Illiterate	0	0.0
	Able to read and write	2	16.7
	Primary school graduate	0	0.0
	Secondary school graduate	1	8.3
	Institute graduate	5	41.7
	College or postgraduate	4	33.3
Father's Occupational Status	Employed	8	66.7
	Self-employed	4	33.3
Mother's Educational Level	Illiterate	16	13.3
	Able to read and write	0	0.0
	Primary school graduate	17	14.2
	Secondary school graduate	32	26.7
	Institute graduate	16	13.3
	College or postgraduate	27	22.5
Mother's Occupational Status	Employed	16	14.8
	Housewife	92	85.2

Table 2. Relationship Between Socio-Demographic Characteristics and Knowledge of Physical Development (12-18 Months)

Demographic Variable	Category	Do not Know	Uncertain	Certain	Total (n)	Chi-Square	p-value
Mothers' Level of Education	Illiterate	11 (10.19%)	4 (3.70%)	1 (0.93%)	16 (14.81%)	101.0578	<0.0001
	Primary	7 (6.48%)	9 (8.33%)	1 (0.93%)	17 (15.74%)		
	Secondary	0 (0.00%)	23 (21.30%)	9 (8.33%)	32 (29.63%)		
	Institute	0 (0.00%)	4 (3.70%)	12 (11.11%)	16 (14.81%)		
	College or Postgraduate	0 (0.00%)	0 (0.00%)	27 (25.00%)	27 (25.00%)		
Mothers' Occupational Status	Employed	10 (9.26%)	16 (14.81%)	16 (14.81%)	42 (38.88%)	9.2328	0.0099
	Housewife	8 (7.41%)	24 (22.22%)	34 (31.48%)	66 (61.12%)		
Mother's Number of Children	1-2	3 (2.78%)	16 (14.81%)	26 (24.07%)	45 (41.67%)	22.8855	0.5008
	3-4	9 (8.33%)	21 (19.44%)	24 (22.22%)	54 (50.00%)		
	5-6	5 (4.63%)	3 (2.78%)	0 (0.00%)	8 (7.41%)		
	7-8	1 (0.93%)	0 (0.00%)	0 (0.00%)	1 (0.93%)		
Father's Number of Children	1-2	1 (8.33%)	5 (41.67%)	1 (8.33%)	7 (58.33%)	6.1714	0.0457
	3-4	3 (25.00%)	0 (0.00%)	2 (16.67%)	5 (41.67%)		

Table 3. Relationship Between Socio-Demographic Characteristics and Knowledge of Physical Development (18-24 Months)

Demographic Variable	Category	Do not Know	Uncertain	Certain	Total (n)	Chi-Square	p-value
Mothers' Level of Education	Illiterate	12 (11.11%)	4 (3.70%)	0 (0.00%)	16 (14.81%)	49.2637	<0.0001
	Primary	10 (9.26%)	7 (6.48%)	0 (0.00%)	17 (15.74%)		
	Secondary	5 (4.63%)	24 (22.22%)	3 (2.78%)	32 (29.63%)		
	Institute	6 (5.56%)	9 (8.33%)	1 (0.93%)	16 (14.81%)		
	College or Postgraduate	4 (3.70%)	10 (9.26%)	13 (12.04%)	27 (25.00%)		
Mothers' Occupational Status	Employed	3 (2.78%)	7 (6.48%)	6 (5.56%)	16 (14.81%)	7.1151	0.0285
	Housewife	34 (31.48%)	47 (43.52%)	11 (10.19%)	92 (85.19%)		

Table 4. Relationship Between Socio-Demographic Characteristics and Knowledge of Physical Development (24-36 Months)

Demographic Variable	Category	Do not Know	Uncertain	Certain	Total (n)	Chi-Square	p-value
Mothers' Level of Education	Illiterate	16 (14.81%)	0 (0.00%)	0 (0.00%)	16 (14.81%)	82.9044	<0.0001
	Primary	17 (15.74%)	0 (0.00%)	0 (0.00%)	17 (15.74%)		
	Secondary	28 (25.93%)	4 (3.70%)	0 (0.00%)	32 (29.63%)		
	Institute	5 (4.63%)	10 (9.26%)	1 (0.93%)	16 (14.81%)		
	College or Postgraduate	21 (19.44%)	13 (12.04%)	12 (11.11%)	27 (25.00%)		
Mothers' Occupational Status	Employed	3 (2.78%)	8 (7.41%)	5 (4.63%)	16 (14.81%)	16.2870	0.0003
	Housewife	65 (60.19%)	19 (17.59%)	8 (7.41%)	92 (85.19%)		
Mother's Number of Children	1-2	21 (19.44%)	15 (13.89%)	9 (8.33%)	45 (41.67%)	12.4115	0.0500
	3-4	38 (35.19%)	12 (11.11%)	4 (3.70%)	54 (50.00%)		
	5-6	8 (7.41%)	0 (0.00%)	0 (0.00%)	8 (7.41%)		
	7-8	1 (0.93%)	0 (0.00%)	0 (0.00%)	1 (0.93%)		

DISCUSSION

This study aimed to assess parental knowledge of toddler physical development in Rania City and examine the relationship between socio-demographic characteristics and parental understanding. The findings highlight several critical insights into the factors influencing parental knowledge, including education, occupation, and the number of children.

The results reveal that mothers' educational levels significantly impact their knowledge of toddler physical development. Specifically, higher educational attainment among mothers was associated with greater certainty and understanding of developmental milestones across all examined age groups (12-18 months, 18-24 months, and 24-36 months). These findings are consistent with previous research, showing that maternal education is a crucial determinant of child-rearing practices and knowledge of child their time away from their children, enhancing their knowledge and involvement in their child's development. However, it is essential to consider that homemakers may face different challenges, such as limited access to resources and social support, which can impact their knowledge and practices.

Interestingly, the study identified a complex relationship between the number of children in a family and parental knowledge of toddler physical development. While one might expect that parents with more children would have more significant experience and, therefore, more knowledge, the findings suggest this is not always the case. The study found significant correlations between the number of children and knowledge levels, particularly in the 12-18 month and 24-36 month age groups. development. Educated mothers are more likely to access and utilize information regarding child health and development, leading to better outcomes for their children (Ertem et al., 2007). This underscores the importance of educational interventions targeted at mothers, particularly in communities where educational attainment may be lower.

The study also found a significant relationship between mothers' occupational status and their knowledge of physical development. Employed mothers demonstrated a higher level of understanding than homemakers, particularly in the 12-18-month and 24–36-month age groups. This finding may be attributed to the increased exposure of employed mothers to educational resources and social networks that provide information on child development. Additionally, working mothers might be more proactive in seeking information to compensate for

However, the nature of this relationship appears to be multifaceted. Parents with a more significant number of children may face challenges in dedicating time and resources to each child's development, leading to gaps in knowledge. Conversely, parents with fewer children might focus more intensely on their child's development, resulting in a deeper understanding of physical milestones. These findings align with previous studies that have observed a similar inverse relationship between the number of children and parental knowledge (Ertem et al., 2007).

The study's results also reflect the broader socio-economic context of the families involved. Most participants reported barely sufficient or sufficient economic status, which may influence their access to educational resources and healthcare services. Economic

constraints can limit opportunities for parents to engage in learning activities or seek guidance from healthcare professionals, affecting their knowledge of child development. This highlights the need for targeted interventions that address socioeconomic barriers and provide accessible education and support to parents, particularly in economically disadvantaged communities.

Moreover, the near-universal urban residency of the participants (99.2%) suggests that the study's findings may not fully capture the experiences and challenges faced by parents in rural areas. Rural communities often have less access to healthcare and educational resources, which could further impact parental knowledge. Future research should explore the differences between urban and rural populations to develop more comprehensive strategies for improving parental knowledge across diverse settings.

In conclusion, this study underscores the critical role of maternal education, employment, and family dynamics in shaping parental knowledge of toddler physical development. The findings suggest that educational interventions should be prioritized for mothers, especially those with lower educational attainment and those who are housewives. Additionally, support programs that address the challenges faced by larger families and economically disadvantaged parents are essential for enhancing parental understanding and promoting child health and development. These efforts ensure that all children, regardless of their socio-demographic background, receive the support they need to achieve their developmental milestones.

CONCLUSIONS

This study highlights the critical influence of parental education, employment, and family structure on toddler physical development knowledge in Rania City. The findings reveal that mothers with higher educational attainment and employment status know more about developmental milestones, emphasizing the importance of educational opportunities and resources for parents. Additionally, the complex relationship between the number of children and parental knowledge suggests that families with more children may require additional support to meet each child's developmental needs.

The study underscores the necessity of targeted interventions that address the educational needs of parents, particularly those with lower levels of formal education and those who are not employed. These interventions should enhance parents' understanding of child development, equipping them with the knowledge and skills to effectively support their children's growth. Furthermore, addressing socio-economic barriers and providing accessible educational resources is essential in fostering an environment where all parents can contribute positively to their children's developmental outcomes, regardless of their background.

In conclusion, empowering parents with the proper knowledge and tools is vital for ensuring the healthy physical development of toddlers. Focusing on educational support and addressing socio-economic challenges can improve parental knowledge and promote better developmental outcomes for children in Rania City and beyond.

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Study the concept and write and review the final edition by all authors.

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The authors report no conflict of interest

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