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Parental Knowledge of Child Speech and Language Development in Riyadh, Saudi Arabia: Associated Factors

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Abstract

Background: Parental awareness of speech and language development is essential for early detection and intervention of communication disorders. Inadequate knowledge can delay diagnosis and access to necessary support services.

Aim of Study: The current study examines parents' knowledge of child speech and language development, along with their understanding of related disorders. It also explores various factors influencing these disorders among families in Riyadh, Saudi Arabia.

Patients and Methods: Conducted as a cross-sectional study, it included 555 families with children between the ages of 1 and 6 years. Data was gathered from different community settings to ensure a diverse representation of participants.

Results: The findings revealed that 54.2% of parents had limited awareness of speech and language delays, indicating a widespread knowledge gap. A significant relationship was found between a child's age and parental perception, with parents of older children (5–6 years) being more likely to recognize speech issues (p=0.002). Additionally, higher family income was strongly associated with greater awareness (p=0.007).

Conclusion: These results emphasize the importance of implementing targeted educational programs to improve parental understanding, promote early intervention, and enhance children's speech and language development outcomes.

Key Words: Delayed speech – Language disorders – Parental knowledge – Speech disorders.

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Introduction

SPEECH and language development are fundamental components of early childhood that significantly influence a child's cognitive, social, and emotional growth. Delays in these areas can lead to long-lasting effects, including academic challenges, social difficulties, and diminished self-esteem **[1,2].** Early recognition and intervention are crucial for mitigating these adverse outcomes, making parental awareness and knowledge of speech and language milestones essential for timely diagnosis and support **[3].**

The prevalence of speech delays varies, affecting between 2% and 8% of children in developed countries **[1,4].** The consequences of leaving this condition untreated are severe, with 40% to 60% of children experiencing persistent speech and language delays into adulthood, increasing their risk for social, emotional, behavioral, and cognitive problems **[2,5].** A previous community-based study in Saudi Arabia found that 16.4% of preschoolers required speech therapy interventions based on parental reports **[6].** Moreover, adults with persistent speech or language disorders, often encounter lower employment rates and higher unemployment **[7].**

Speech delays can arise from a multitude of factors, including medical conditions such as intellectual disabilities, developmental delays, and autism. Additionally, environmental factors like noise exposure and socioeconomic status contribute significantly. Family-related influences, including the education levels of parents and the amount of screen time children experience, also play an important role **[8].** Excessive screen time can reduce the amount of interactive time parents spend with their children,

which is essential for language development. Studies from Korea, the USA, Indonesia, India, and the United Kingdom have found associations between high levels of screen exposure and increased risk of language delays **[9-13]**. However, research from Thailand suggests that early exposure to television may not necessarily be associated with delayed language development, indicating that the relationship between media exposure and language outcomes may be more complex **[14]**. Although standardized screening tools are occasionally lacking in certain languages such, using developmental milestones and parent-physician assessments can aid in identifying children requiring further evaluation **[15]**.

Parental ability to detect speech delays varies significantly across age groups, with younger children often overlooked **[5]**. Furthermore, parental knowledge regarding child speech and language development varies significantly across different regions and populations **[16]**. Studies indicate substantial gaps in parental knowledge about speech and language disorders, emphasizing the need for improved education and support for caregivers **[17]**. Studies in Turkey, Egypt, and Saudi Arabia demonstrate low levels of awareness among parents **[17-20]**. This lack of awareness is often accompanied by misconceptions about the causes and consequences of speech delays, which can hinder effective intervention efforts.

Given the critical role of parental knowledge in early intervention, this study aims to evaluate the level of parental awareness regarding child speech and language development and associated factors related to speech delay among families in Riyadh, Saudi Arabia. We expect the result of our study will help the decision-maker to establish educational programs that increase the level of awareness to avoid the implications caused by the low level of awareness among parents.

Patients and Methods

Study design and site:

A cross-sectional survey was conducted in Riyadh, the capital of Saudi Arabia to achieve the main objective of the study. Data collection was conducted from September 4 to 19 October 2023 by a team of trained students from the College of Medicine at Al-Maarefa University, who followed standardized protocols for accuracy and consistency. Data were collected from families within their community, in community centers and parks from the different five main zones of the City (East, West, South, North, and Central areas).

Study subject: This study includes parents and family members who take care of children, orphanages, baby daycare, and children between two to six years of age in Riyadh city. On the other hand, parents and children out of Riyadh, children less than 12 months, and stuttering children, were excluded from the study.

Sample size: The sample size for this study was calculated using the formula $n=(Z\ 1.96)^2 \times p \times (1-p)/(0.05)^2$. A 95% confidence level (Z=1.96) and a margin of error of 5% were established. The prevalence rate of awareness was estimated at 57% based on previous research with the same aim of searching for parental knowledge of their child's speech and language development **[5]**. The initial sample size was determined to be 370. To account for design effects (1.5), the sample size was adjusted to 555 participants.

Sample technique: Participants were distributed across five different areas of Riyadh City by randomly selecting community locations such as malls, parks, and seating areas. Assuming equal population and socioeconomic conditions across the city, 111 participants were enrolled from each district. This approach likely yielded a sample representative of the overall population distribution in Riyadh's five areas.

Data collection instrument:

A self-administered questionnaire was developed based on an intensive review of the available literature **[5,7,17, 18,21,22,23]**, to assess the prevalence and level of awareness of speech and language development and associated factors related to speech delay among families. The questionnaire consisted of five parts: Socio-demographic information related to parents, and mother or father-to-child status, age of mother and father, gender, education level of mother and father, family monthly income, child age, and child's gender. The second part assesses the relationship of child-to-parent answered with "yes", and "No". The third part, concerned with the parent's knowledge about speech delay was measured by questions. Eleven questions were assessed where each question contains one of the three responses, "Yes", "No" and "Not sure" and is coded as (1) for correct and (0) for incorrect responses. Yielded scores of the knowledge section were summed and calculated based on these responses, and a cutoff score of 60% was established to categorize participants into those with sufficient knowledge (above 60%) and those with insufficient knowledge (below 60%). The fourth part assesses the attitude of parents toward the method of managing a child with language or speech delay if it occurs. Twelve questions were constructed for this purpose using a five-point Likert scale (strongly agree, agree, no opinion, disagree, and strongly disagree) with (5) for correct answer and (1) for incorrect answer, accordingly. The sum of the scores was calculated and a cut-off point score was established as 60%. Therefore, that good attitude was scored above 60%, while those parents who scored 60% or below were considered with poor attitude. The fifth part was related to the

source of information parents received about the knowledge of language development and speech delay and was scored with (Yes) and (No) answers.

The questionnaire was initially written in English and was then translated into the regional dialect (Arabic), with the assistance of a language expert. Back translation was then performed to English language to maintain consistency. A pilot study was conducted using a small group of participants (n=20) to study the responses, obtain feedback for further modifications, and ensure that the time to complete the survey was adequate. The questionnaire had undergone internal validation (face validity and content validity) by two professors at the College of Medicine Al-Maarefa University and three specialists. Fine adjustments to the questions were made to ensure clarity, and accuracy, and to exclude ambiguity. Data were collected via face-to-face interviews of 5–7min duration.

Data analysis: All the questionnaires were reviewed before entering the data into the analysis program. The Social Package for Social Sciences (SPSS) program v.26.0 (IBM Corp., Armonk, NY) was used for the analysis of the data. The data were presented as the mean standard deviation for continuous variables and frequencies (percentages) for categorical variables. A chi-square test or Fisher's exact test was used to compare categorical variables (e.g., gender, birth order, family income, education level, and language delay). Accordingly, the level of the association has been tested between the adequacy of knowledge, and attitude, with the sociodemographic characteristics of the participants. A *p*-value of <0.05 was considered statistically significant.

Ethical consideration: Verbal informed consent was obtained from all participants, outlining the study's purpose, procedures, potential risks, and benefits. Participants were assured of their voluntary participation and the right to withdraw at any time. To safeguard participant privacy, data was securely stored, accessed only by authorized personnel, and anonymized through unique identifiers. This study received ethical approval from the Al-Maarefa University IRB (Ref. No: IRB23-037).

Results

Sociodemographic characteristics of the participants:

Out of the total participants in this study (n=555), age was distributed almost equally with one-third for each age group of child participants. Mothers were more concerned about the child (49.4%), almost two-thirds of the mothers holding a university education (62.7%), and around one-third (36.4%) of the participants indicate a monthly income with around twenty-thousand Saudi Riyal or more (Table 1).

Table (1): Sociodemographic characteristics of the participants.

Variables	Categories	N	%
Age of children	1-2 years	183	33.0
	3-4 years	193	34.8
	5-6 years	179	32.3
Relation to child	Father	115	20.7
	Mother	274	49.4
	Other	166	29.9
The educational level of the Parents	Secondary/below	143	25.8
	University	348	62.7
	Postgraduate	64	11.5
Family monthly income	<5000	57	10.3
	5000-10000	140	25.2
	10000-15000	156	28.1
	>20000	202	36.4

Social characteristics of the participant's children in their family:

Questions were asked to the participants regarding the relation of the child to his social surroundings and positive answers were given such as those related to living with his/her parents (89.4%), another person taking care of the child (31.9 %), if he/she has any siblings (76.6%) if he/she spends more time on smart devices (70.6%), and if the child responds to his/her name (91.0%), as illustrated in Table (2).

Table (2): Social characteristics of the participant's children in their family.

Variables	Categories	N	%
Does the child live with his parents?	No	59	10.6
	Yes	496	89.4
Is someone (other than parents) taking care of the child?	No	378	68.1
	Yes	177	31.9
Does the child have any siblings?	No	130	23.4
	Yes	425	76.6
Does the child spend time on smart devices?	No	163	29.4
	Yes	392	70.6
Does your child respond to his/her name?	No	50	9.0
	Yes	505	91.0

Level of awareness among parents on both speech delays and language development of their children, as seen in Table (3).

Table (3): Level of awareness among parents on both speech delays and language development of their children.

Variables	Categories	N	%
Have you ever heard about speech delays in children?	No	118	21.3
	Yes	437	78.7
Are you aware of language development in children?	No	184	33.2
	Yes	371	66.8
Inherited from family	No	387	69.7
	Yes	168	30.3
This happens because of intellectual disability	No	366	65.9
	Yes	189	34.1
This happens if children have been punished by fate or God	No	514	92.6
	Yes	41	7.4
Caused by a physical, medical problem	No	334	60.2
	Yes	221	39.8
Any History of recent trauma or stress	No	426	76.8
	Yes	129	23.2
Screen Viewing for more than two hours/daily	No	151	27.2
	Yes	404	72.8
Family history of speech and language	No	419	75.5
	Yes	136	24.5
Any oropharyngeal deformity	No	462	83.2
	Yes	93	16.8
Overall awareness	Inadequate	237	42.7
	adequate	318	57.3

Two questions were asked by the participants to determine their awareness of speech delays and language development among their children. The majority of participants were aware of children's speech delays (78.7%), and approximately two-thirds (66.8%) had knowledge of language development. Most respondents believed that speech delays are not inherited (69.7%) and are caused by intellectual disability (65.9%). A significant majority disagreed that speech delays are a punishment from God (92.6%) or result from physical or medical problems (60.2%). Additionally, 76.8% reported no recent history of trauma or stress. Regarding daily habits, 72.8% of children were exposed to screen time for more than two hours. Furthermore, 75.5% of participants did not see a connection between speech delays and family history, and 83.2% did not believe there was a link between speech delays and oropharyngeal deformities.

Moreover, the level of awareness among parents on both speech delays and language development in children was calculated by using 60% as a cut-off point from the sum of the answers to all questions in this part. Answers scored above 60% were considered adequate awareness (57.3%), while those participants with answers scored equal to or below 60% were considered with an inadequate awareness level of speech delays and language development in children (42.7%).

Association between awareness of speech delays and language development with sociodemographic characteristics:

A strong association was found between awareness of speech delays and language development with the age of children, relation to the child, and family income, illustrated in Table (4) (p-value <0.001 for each variable). The parental level of education was found to have no significant effect on knowledge about speech delay.

Table (4): Association between awareness of speech delays and language development with sociodemographic characteristics

Variables	Categories	Insufficient knowledge		sufficient knowledge		p-value
		N	%	N	%	
Age of children	1-2 years	73	39.9	110	60.1	0.001
	3-4 years	68	35.2	125	64.8	
	5-6 years	96	53.6	83	46.4	
Relation to child	Father	53	46.1	62	53.9	0.001
	Mother	92	33.6	182	66.4	
	Other	92	55.4	74	44.6	
The educational level of the parent	Secondary/below	70	49.0	73	51.0	0.151
	University	138	39.7	210	60.3	
	Postgraduate	29	45.3	35	54.7	
Family monthly income	<5000	23	40.4	34	59.6	0.001
	5000-10000	82	58.6	58	41.4	
	10000-15000	51	32.7	105	67.3	
	>20000	81	40.1	121	59.9	

Source of knowledge:

Source of knowledge on speech delays and language development in children.

The majority of the participants answered that their main source of expertise on speech delays and language development in children was from relatives and friends (42.9%), followed by searching the internet (29.9%), and very few stated that information was received from television and radio (2.3%), as seen in Table (5).

Table (5): Source of knowledge on speech delays and language development in children.

Variables	N	%
Internet	166	29.9
Television and Radio	13	2.3
Relatives and friends	238	42.9
Social media	87	15.7
Other	51	9.2

Participants generally view speech delays and language development issues in children as significant problems. A substantial portion believes that speech delays require behavioral intervention therapy (44.5%) and that children should be diagnosed as early as possible (51.9%). Additionally, 55.3% felt that speech delays negatively impact a child's social communication.

Regarding the causes and associations of speech delays, 38.2% of participants linked them to genetic factors, while 37.1% associated speech delays with autism. Furthermore, 39.8% perceived a connection between speech delays and psychological disorders. Nearly half of the respondents (46.7%) agreed that speech delays are easy for parents to notice.

Participants also highlighted the importance of early recognition, with 53.7% stating that identifying speech delays can aid in diagnosing other disorders like autism. However, 44.7% expressed concern that a late diagnosis could lead to conflicting consequences. Additionally, 34.8% considered speech delays to be a serious disorder, and 34.2% suggested that a child not responding to their name might indicate deafness. Lastly, 29% believed that any speech delay occurring after one year of age should be referred to speech therapy.

The cut-off point of 60% was used to categorize participants with high perception in considering the speech delays and language development in children as a problem or not. Therefore, participants who scored above 60% (516; 93%) were considered with good perception, while those with equal to or under 60% score (39; 7%) were considered with less perception (Table 6).

Association between the level of perception of the participants in considering speech delays and language development with sociodemographic characteristics:

Table (7) illustrates participants' perceptions of speech delays and language development in relation to various sociodemographic factors. The analysis reveals a significant association between the child's age and parental perception, with parents of children aged 5-6 years showing a greater awareness of speech issues (p=0.002). Additionally, fathers tend to have slightly higher perceptions than mothers and other caregivers, although the relationship to the child does not significantly influence perceptions (p=0.136). Educational level also does not have a significant impact on perceptions (p=0.121). In contrast, families with a higher monthly income demonstrate greater knowledge and significantly higher perceptions of speech delays (p=0.007).

In summary, the child's age and family income are strong factors influencing participants' perceptions of speech delays, while the relationship to the child and educational level have a minimal impact.

Table (8) presents the results of a logistic regression analysis aimed at predicting participants' levels of knowledge and perception regarding speech delays and language development based on various sociodemographic factors. For knowledge, having children aged 1-2 years and 3-4 years, as well as being a mother, were significant predictors. Specifically, parents of children aged 1-2 years had 56% higher odds of possessing greater knowledge (OR=1.563, p=0.047), and those with children aged 3-4 years had 68% higher odds (OR=1.689, p=0.021) compared to the reference group. Mothers were found to be significantly more knowledgeable than fathers, with an odds ratio of 20.205 (95% CI: 1.459–3.333, p<0.001). Additionally, parents with a monthly income between 5,000-10,000 SR were less likely to be knowledgeable than those with higher incomes (OR=0.561, 95% CI: 0.348–0.903, p=0.017). Regarding perceptions, the analysis revealed that parents with university qualifications were nearly three times more likely to have a sufficient perception of speech delays and language development (OR=2.985, 95% CI: 1.387–6.424, p=0.005).

In summary, the child's age and family income are strong predictors of parents' knowledge about speech delays, with mothers demonstrating significantly higher knowledge levels. Furthermore, parental education level plays a crucial role in shaping perceptions of speech delays. Other sociodemographic factors, such as the relationship to the child, did not show a significant impact.

Table (6): Perception of the participants in considering speech delays and language development in children as a problem.

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
It is an issue that requires behavioral intervention therapy	N	10	61	58	179	247
	%	1.8	11	10.5	32.3	44.5
It should be diagnosed as soon as possible	N	4	16	90	157	288
	%	0.7	2.9	16.2	28.3	51.9
It affects the child's social communication	N	4	52	22	170	307
	%	0.7	9.4	4	30.6	55.3
It is associated with genetic factors	N	19	80	212	179	65
	%	3.4	14.4	38.2	32.3	11.7
The late diagnosis will develop conflict consequences	N	7	38	60	248	202
	%	1.3	6.8	10.8	44.7	36.4
It is associated with autism	N	13	79	180	206	77
	%	2.3	14.2	32.4	37.1	13.9
It could be noticed easily by parents	N	3	24	66	259	203
	%	0.5	4.3	11.9	46.7	36.6
I think it is not a serious disorder.	N	55	147	103	193	57
	%	9.9	26.5	18.6	34.8	10.3
It may help me to diagnose other disorders like autism	N	3	35	103	298	116
	%	0.5	6.3	18.6	53.7	20.9
It has a close relation with psychological disorders	N	11	46	162	221	115
	%	2	8.3	29.2	39.8	20.7
If my child is not responding to his name, it could be deafness	N	31	167	190	116	51
	%	5.6	30.1	34.2	20.9	9.2
Speech delay after age one warrants speech therapy	N	19	159	93	161	123
	%	3.4	28.6	16.8	29	22.2
Sufficient perception	N	516				
	%	93.0				
Insufficient perception	N	39				
	%	7.0				

Table (7): Association between perception of speech delays and language development with sociodemographic characteristics.

Variables	Categories	Insufficient perception		Sufficient perception		*p*-value
		N	%	N	%	
Age of children	1-2 years	13	7.1	170	92.9	.978
	3-4 years	14	7.3	179	92.7	
	5-6 years	12	6.7	167	93.3	
Relation to child	Father	13	11.3	102	88.7	.062
	Mother	13	4.7	261	95.3	
	Other	13	7.8	153	92.2	
The educational level of the parent	Secondary/below	18	12.6	125	87.4	.007
	University	16	4.6	332	95.4	
	Postgraduate	5	7.8	59	92.2	
Family monthly income	<5000	6	10.5	51	89.5	.583
	5000-10000	10	7.1	130	92.9	
	10000-15000	12	7.7	144	92.3	
	>20000	11	5.4	191	94.6	

Table (8): Regression analysis model for predicting level of knowledge and perception with sociodemographic factors.

Variables	Categories	Knowledge			Perception		
		OR	95% CI	*p*-value	OR	95% CI	*p*-value
Age of children	1-2 years	1.563	1.007-2.425	.047	.942	.399-2.219	.891
	3-4 years	1.689	1.082-2.636	.021	.786	.333-1.857	.583
	5-6 years	R	–	–	R	–	–
Relation to child	Father	1.333	.812-2.189	.256	.578	.250-1.338	.201
	Mother	2.205	1.459-3.333	.000	1.505	.662-3.422	.330
	Other	R	–	–	R	–	–
The educational level of the parent	Secondary/below	R	–	–	R	–	–
	University	1.061	.688-1.637	.789	2.985	1.387-6.424	.005
	Postgraduate	.949	.495-1.821	.875	1.958	.630-6.085	.246
Family monthly income	<5000	1.030	.544-1.951	.928	.646	.212-1.963	.440
	5000-10000	.561	.348-.903	.017	.904	.343-2.383	.838
	10000-15000	1.239	.788-1.947	.354	.608	.253-1.458	.265
	>20000	R	–	–	R	–	–

R = Reference.

Discussion

The study aimed to assess parental knowledge of child speech and language development in Riyadh, Saudi Arabia. Results revealed a significant gap in awareness, with only 57.3% of participants demonstrating adequate knowledge. Although most parents recognized the importance of early intervention and diagnosis, misconceptions about the causes and consequences of speech delays persisted. Inadequate awareness was particularly prevalent among parents with lower educational levels, with nearly half of those holding a secondary education or below showing insufficient knowledge. Regression analysis supported this trend, indicating that parents with postgraduate degrees were approximately twice as knowledgeable as their counterparts (95% CI=1.434–5.118). This knowledge gap is concerning, as it can delay early diagnosis and intervention, which are critical for effective treatment.

Our study showed that factors such as age, education, and income significantly influence knowledge levels. Younger children and those from lower-income families appear to be particularly vulnerable to knowledge deficits. This suggests a need for early childhood education programs and income-based support initiatives focused on speech and language development. Conversely, the unexpected finding that parental education level did not significantly impact knowledge challenges the assumption that higher education equates to greater awareness. Potential explanations for this discrepancy include factors such as access to reliable information, cultural beliefs about child development, or the specific content of educational programs. Further research is necessary to elucidate these factors and inform more effective interventions.

On the other hand, exploring the relationship between knowledge and perception is essential. While higher knowledge levels might correlate with a better perception of speech delays as a problem, other factors such as personal experiences or cultural beliefs may also influence perception. For example, our findings illustrated that most parents do not believe that speech delays are inherited or caused by physical, medical, or intellectual disabilities, which may indicate a lack of understanding of the complex factors that can contribute to speech and language delays [24]. However, understanding this complex interplay can help tailor interventions to address knowledge gaps and misconceptions. Some studies suggested that physicians were preferred and highly trusted, and internet sources appeared to impact the medical knowledgeof the population [25]. Our findings identified that parents'positive perceptions of the communication skills of such children play a significant role in their children's early intervention plans and language development [26].

To the best of our knowledge, currently, no research examining the knowledge and beliefs of parents with preschool-aged children in Riyadh, Saudi Arabia, about speech delays and language development. The lack of information about the causes of these conditions in this specific population suggests that cultural factors may play a significant role. This highlights the need for educational programs aimed at helping families understand the underlying causes of speech delays and language development issues, enabling early intervention and prevention of potential long-term problems. Concerning early intervention, it was noteworthy that 44.5% of the participants strongly endorsed the importance of early intervention for speech delays. This reflects a growing acknowledgment of the need for prompt

therapy and support. Additionally, over half of the participants strongly believed in the significance of early diagnosis in addressing speech delays, underscoring the pivotal role early identification plays in a child's language development. A study conducted in Turkey showed that 85.9% of parents said that they had heard of speech and language disorders [17]. In our study, a minority of respondents suggested that speech delay is caused by intellectual disability, or by physical, or medical problems. Other parents identified that speech delay is a result of hearing loss, untreated otitis media, and oro-pharyngeal deformities as risk factors which is aligned with an Indian study [8].

Television viewing can have both positive and negative effects on children's development. According to the American Academy of Pediatrics (AAP), electronic screen time should not exceed two hours per day [27]. This recommendation is based on the concern that excessive screen time may reduce the time children spend interacting with their parents, potentially hindering their development. In our study, approximately three-quarters of respondents reported that their children watch screens (television, mobile devices, or laptops) for more than two hours daily, indicating that excessive screen time could be a significant risk factor. Supporting this, a Korean study found that children exposed to more than two hours of television daily had a 2.7 times higher risk of language delays compared to those who watched less than one hour [9]. Similar findings were reported in studies from the USA [10], Bali, Indonesia [11], Pimpri, Pune [12], and the United Kingdom [13]. However, a study from Thailand showed that around 95% of Thai children were exposed to television at a very young age (six months or younger), and this early exposure was not associated with language delays by the age of two [14]. These mixed results highlight the complexity of screen time's impact on child development. While excessive screen exposure is generally linked to language delays, early and limited exposure may not have the same negative effects. Further research is needed to understand the factors that influence these outcomes and to develop guidelines that support healthy development.

Most participants reported obtaining information from family and friends, with approximately 43% relying on these personal connections. This reliance can sometimes lead to misunderstandings about speech and language development. Despite the widespread use of social media today, only about 16% of participants turned to these platforms for information, suggesting that crucial details may not be effectively reaching parents. Similar patterns were observed in studies conducted in Jazan and Riyadh, Saudi Arabia, where friends, relatives, and media were also the primary sources of information [28]. Unfortunately, these sources often provide incorrect or misleading information about speech delays, making it difficult for parents to fully understand the underlying factors [25]. This dependence on informal channels underscores the need for more reliable and accurate information sources to help parents better understand and support their children's speech and language development.

Strengths and Limitations:

Our study focused on understanding parents' awareness and knowledge of speech and language delay and its associated factors. Notably, there is a paucity of recent, comprehensive research on speech and language development in this region.

The accuracy of the study's findings may be limited by several factors. Self-reporting bias could have influenced participants' responses, and the study's focus on parental knowledge without assessing children's actual speech and language development represents a potential limitation. Additionally, the use of convenience sampling, recruiting participants from specific public locations in Riyadh, may have introduced selection bias, affecting the generalizability of the results.

Future research:

Looking ahead, future research should explore the long-term consequences of speech delays on children's academic, social, and emotional development. Investigating the effectiveness of various intervention approaches for different subpopulations would also be valuable. Furthermore, longitudinal studies could provide deeper insights into the factors that influence the trajectory of speech and language development over time. These efforts are essential to ensure timely diagnosis and effective intervention, ultimately fostering better outcomes for children experiencing speech and language delays.

Conclusion:

The study findings reveal a significant gap in parental knowledge regarding speech and language delays and their associated factors. Awareness levels varied across different gender, age, education, and income groups, highlighting the need for tailored educational programs and healthcare initiatives to enhance parental understanding of speech delays. Additionally, participants frequently relied on unreliable sources of information, emphasizing the importance of leveraging trusted platforms such as the Ministry of Health's website and official social media channels to disseminate accurate information. To address these gaps, further research and community-based initiatives are necessary to improve parental knowledge and support in this crucial aspect of child development.

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مدى معرفة الوالدين بتطور النطق واللغة لدى الأطفال فى مدينة الرياض: العوامل المؤثرة

الخلفية: يُعد وعى الوالدين بتطور النطق واللغة لدى الأطفال أمرًا أساسيًا لاكتشاف الاضطرابات مبكرًا والتدخل فى الوقت المناسب. وقد يؤدى نقص المعرفة إلى تأخير فى التشخيص والحصول على الخدمات اللازمة. تهدف هذه الدراسة إلى تقييم فهم الوالدين ومدى تأثره بعدة عوامل فى مدينة الرياض، المملكة العربية السعودية.

الأهداف: تهدف هذه الدراسة إلى تقييم معرفة الوالدين بتطور النطق واللغة لدى الأطفال، وفهمهم للاضطرابات المرتبطة بها. كما تسلط الضوء على العوامل المختلفة التى قد تؤثر فى هذه الاضطرابات بين العائلات فى مدينة الرياض، المملكة العربية السعودية.

الطرق: أُجريت الدراسة باستخدام المنهج الوصفى المقطعى، وشملت ٥٥٥ عائلة لديها أطفال تتراوح أعمارهم بين ١ و٦ سنوات. تم جمع البيانات من مواقع مجتمعية مختلفة لضمان تمثيل متنوع للمشاركين.

النتائج: أظهرت النتائج أن ٥٤,٢٪ من الوالدين لديهم وعى محدود بتأخر النطق واللغة، مما يشير إلى وجود فجوة معرفية واسعة. كما وُجدت علاقة ذات دلالة إحصائية بين عمر الطفل وإدراك الوالدين، حيث كان الآباء الذين لديهم أطفال أكبر سنًا (٥–٦ سنوات) أكثر قدرة على ملاحظة مشكلات النطق (القيمة الاحتمالية = ٠,٠٠٢). بالإضافة إلى ذلك، ارتبط ارتفاع دخل الأسرة بزيادة الوعى بشكل ملحوظ (القيمة الاحتمالية = ٠,٠٠٧).

الاستنتاجات: تُبرز هذه النتائج أهمية تنفيذ برامج توعوية موجهة لتحسين فهم الوالدين، وتعزيز التدخل المبكر، والمساهمة في تحسين نتائج تطور النطق واللغة لدى الأطفال.