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Knowledge and Attitudes of Parents toward Speech Delay among Children Under 5-Years at Hearing and Speech Center in Holy Kerbala City

A thesis Submitted By

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To the Council College of Nursing/University of Kerbala, in Partial Fulfillment of the Requirements for the Master degree in Nursing Sciences

Supervised

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Muharram - 1444 A.H. **August- 2022 A.D.**

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العليم الحكيم ﴾

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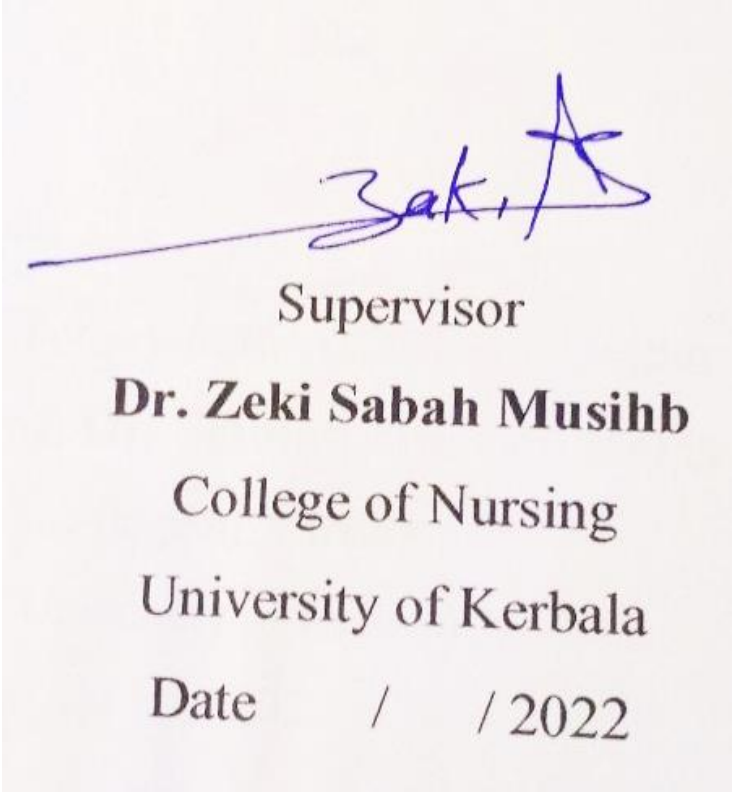
Supervisor Certification

I certify that this thesis, which entitled (**Knowledge and Attitudes of Parents' toward Speech Delay among Children Under 5-Years at Hearing and Speech Center in Holy Kerbala City**), submitted by **Alaa Neama Hade**, was prepared under our supervision at the college of nursing, university of kerbala in partial fulfillment of the requirements for the degree of master in nursing sciences.



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Dedication

I dedicate my effort and work to:

Who inspired me with knowledge and the ability to work ... ***My God and my Lord.***

The sun that nourishes my life planet with his wisdom rays… ***My father.***

*The spring of my soul…****My mother gives me support and courage with all my love and respect.***

*The shining stars in my life…****My brother and sisters.***

*My love, my dear and my life partner…****My husband.***

My dear friends, with my love and respect.

Alaa Neama Hade 2022

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Abstract

Background: A speech delay occurs when a youngster does not reach the expected speech milestones for their chronological age. Language barriers prevent the youngster from communicating successfully, and the vast majority of children will display signs of long-term academic and social weaknesses. There's a possibility that the effect will be felt. To name a few, There are issues with comprehensible speech, working memory, and sophisticated vocabulary.

Objective: The present study aims to assess the parent's knowledge and attitude toward speech delay among children under 5 years and also to determine the relationship between parent's knowledge and attitude toward speech delay and same sociodemographic such as age, gender, level of education, work of parents.

Methodology: A descriptive and analytical cross-sectional study was used. The research has been carried out in the Hearing and Speech Center at the Holy Kerbala City. A non-probability convenience sample (100) parents of children under 5 years with speech delay was used to determine appropriateness. The data were analyzed by using the program of Statistical Package of Social Sciences (SPSS) Version 22.

Results: The study found that low levels of parent's knowledge and attitude about speech delay among children under 5 years of old. Also shows that a significant relationship between parent's knowledge and attitude about speech delay among children under 5 years of old and some demographic characteristics of study sample according to chi-square tests at P- value > 0.05.

Conclusion: The present study concluded that majority of participants from mothers of child represented 76% from study sample, according to the age of parents, the majority were with age group 26-35 years represented 41%, and also shows that low level of parent's knowledge toward speech delay among children under 5 years of old. Also founded that low to a moderate

level of parent's attitudes toward speech delay among children under 5 years This leads to a delay in diagnosis, management and rehabilitation.

Recommendation: Encourages parents specially fathers to attend the sessions and lectures on hearing and speech training of their children and give a clear idea about the important role that fathers play in the treatment and management of speech delay. Focusing on early diagnosis of any speech disorders by parents, teachers specially primary schools, and caregivers, by preparing lectures and posters about speech disorders and how the diagnosis of this problem. Give special attention to children (male gender) when dealing with speech disorders.

List of Contents

List of Tables

List of Appendices

List of Figures

List of Abbreviation

Abbreviation	Word
AASC	American Academy of Speech Correction
DLD	Developmental Language Disorder
et al	Others
F	Frequency.
H	High means of scores.
HL	Hearing loss
L	Low means of scores.

M	Mean
M.	Moderate means of scores.
MS	Mean of the score.
N.S	Non-significant
No	Number
OME	otitis media with effusion.
OPD	Outpatient Department
OSD	Autistic Spectrum Disorder
P	P. value
RS	Relative Sufficient
S	Significant
SD	Standard deviation
TORCH	Toxoplasmosis, Rubella, Cytomegalovirus, & Herpes Simplex
USPSTF	The United States Preventive Services Task Force
VLBW	very low birth weight
VPT	Very Preterm Infants
WHO	World health organization
WW II	World War II
%	Percent
&	And
∑	Summation
≤	Less than or equal.
≥	Greater than or equal.

Chapter One

Introduction

Chapter One

Introduction

1.1. Introduction

When a child does not meet the predicted speech milestones for their chronological age, it is known as a "speech delay." A child's growth may have followed a normal or sequential path, but the ability to generate speaking sounds came later than usual (Ambrose, 2022).

Speech delay, also known as alalia, refers to a delay in the development or use of the mechanisms that produce speech (Dodd and Barbara 2013).

Language or speech delay refers to circumstances in which the ability to understanding and talk develops normally but at a slower rate than predicted, whereas language or speech disorders relate to cases in which the speech or language ability does not develop normally (Jullien, 2021).

Speech delay can frequently be a manifestation of mental and somatic diseases rather than a diagnosis (Yasin et al., 2017).

The child is unable to communicate effectively due to linguistic problems, and a high majority of children will show evidence of long-term academic and social deficits. There's a chance the influence will be felt. To mention a few, there are difficulties with understandable speech, working memory, and advanced vocabulary (Ambrose, 2022).

At school age entry, 6-7% of children have speech delay which can cause issues in one or more areas, such as understanding vocabulary and grammar, inferring meaning, and so on language expression, sound generation, voice, fluency, and Articulation and language use in social situations (Gajard et al., 2018).

Speech delay among children aged less than 5 years, studies have reported prevalence rates ranging from 2.3% to 19% (Sidhu et al., 2013).

Some primary speech delay that cannot be accounted for by low Hearing impairment, nonverbal abilities, and behavioral issues are all examples of nonverbal abilities. Whether it's a psychological issue or a neurological condition, there's a way to help. Limited learning opportunities, for example, are environmental factors or learning a language. As a second language, English could be useful. There is also a connection between the primary and secondary delays Some delays children's speech are indicators of, and secondary to, conditions such as autism, sensory impairment, and learning disabilities or developmental disabilities in general (Boyle, 2011).

Evidence implies that untreated speech and language delay can persist in 40%–60% of the children and these children are at as higher risk of social, emotional, behavioral, and cognitive adult difficulties are prevalent. The prevalence of speech delay has increased. It's been tough to assess because there's a long-held conviction that that speech delay can run in families and isn't caused by anything alarm (Sunderajan and Kanhere, 2019).

The European Region of the World Health Organization (WHO) is working on a project pocket book for primary care for children and adolescents' in Europe. This is the first in a series of reviews aimed at summarizing the findings existing recommendations and the most recent research on children's preventive actions under the age of five years old to notify the WHO editorial group to offer suggestions in primary health care for health promotion In this piece, we took a look at what's already out there recommendations and supporting evidence on the efficacy of universal language and cognitive screening Short and long term effects of speech delay in children under the age of five years of old (Ismailova et al., 2017).

1.2. Importance of the study:

Delayed speech is one of the disorders and problems that occur to children in the toddler and preschool age stage, and their suffering continues even in adolescence and adulthood in some cases. The cause of this problem is attributed to conditions in which the ability to understand and speak normally develops but at a slower rate than expected, while language or speech disorders relate to cases in which speech or language ability does not develop normally. Speech delay is one of the developmental disorders in children (Julian, 2021, Alias and Ramly, 2021).

Speech delay was still present in 54 percent of 5-year-old children after 6 months of follow-up without therapy in one study, while speech disorder was found to be present in 22 percent of cases after 5 years of follow-up without treatment in another study. These results could be taken as absolute signals of intervention. Apart from situations of observed speech delay, the chance of developing speech disorders during school age increases as well (Yasin et al., 2017).

Speech delay in children is not determined by age or geographic area for example : in the United States of America the prevalence of isolated speech and language delays and disorders (not include developmental delays, autistic spectrum disorder, or intellectual disability) was estimated to be 6% (range from 5 to 12 %) between the ages of two and five years old (Jullien, 2021).

That speech delay in childhood may lead to a variety of problems, including youngsters being less capable of learning to express their feelings or wishes, and feeling self-conscious about joining in on the chit-chat with their classmates, and quiet. Interlocutors such as parents, profess-sors, and peers faced similar challenges encouraging them to communicate. Furthermore, another effect of speech delay was anticipated to show up in numerous parts of a child's life, including social communication, emotional,

and behavioral issues, future regulation, and educational outcomes (Ambrose, 2022).

Also in Iraq there are large of cases in multiple city of country. 11.4% of school children in the Hilla City at Iraq had a speech delay, which caused them to have speech and voice disorders (Baieet al., 2015).

In the Ramadi City at Iraq, it was 69.8% of children with speech delays are male and 30.2% are female. 59.2% of cases were at two to three years of age, 34.8% from 3-4 and only 6% from 4-5 years (Zabin et al., 2021).

Speech delay in children will affect other aspects of their development if it is not properly handled. Speech is one vehicle for language communication through sound mixing, while language is the coding system that allows for conceptualization, reasoning, and comprehension (Jullien, 2021).

1.3. Problem statement:

Speech delay is common in children. These children are at risk of social and academic difficulties with persisting consequences into adolescence and adulthood early. Effective and efficient speech therapy is important for families; accessing speech therapy can be difficult due to workforce shortages of speech language pathologists. Cost, socioeconomic status and geographical location can also be barriers.

The reason for the occurrence of speech delay in children can be attributed to mental and physical diseases.

This disorder is not limited to a specific gender, as it affects both sexes and all of them are not unique to a specific age. The affects most age groups in childhood and adolescence

When a child is unable to communicate effectively due to language problems; He will suffer from long-term academic and social deficits. There is also the possibility that the effect will be felt. To name a few, there are

difficulties with understandable speech, working memory, and advanced vocabulary (Ambrose, 2022).

Speech delayed may represented 40%-60% of children with persist into adulthood and are therefore at risk of social, emotional, behavioral and cognitive difficulties (Sunderajan and Kanhere, 2019).

Early intervention may assist a child gain age appropriate receptive and expressive language abilities if a delay is identified (Essentials of Pediatric Nursing, 2021).

Technology-aided speech therapy and, in particular, mobile health has the potential to improve children's access to speech therapy (Furlong et al., 2018).

1.4. Objectives of the study

The present study aims to:

1. Assess the knowledge of parents toward speech delay among children less than five years.
2. Assess attitudes of parents toward speech delay among children less than five years.
3. Find out the relationship between the parents' knowledge level and attitudes with their socio-demographic characteristics.

1.5. Research question:

Do parents know about speech delays for children under the age of five in the Hearing and Speech Center at Holy Kerbala City?

1.7. Definition of Terms:

1.7. 1. Speech delay:

Theoretical Definition:

Speech delay is defined as when a child's capacity to understand and talk develops normally but at a slower rate than expected, whereas language or speech disorders are defined as when a child's speech or

language ability deviates from what is expected as normal development (Jullien, 2021).

Operational Definition:

It is a condition characterized by a delay in the development of the child's ability to understand and speak normally with others.

1.7.2. Knowledge:

Theoretical Definition:

Knowledge is a familiarity with something, which can include facts, information, descriptions, or skills acquired through experience or education. It can refer to the theoretical or practical understanding of a subject (Ali, 2017; Definitions, 2019).

Operational Definition:

Parents' knowledge of all relevant facts about speech delay in pronunciation and informing them of the facts or information related to this problem. So that parents can acquire knowledge through theoretical or practical education.

1.7.3. Attitudes

Theoretical Definition:

An overall evaluation of an object that is based on cognitive, affective, and behavioral information, attitudes can differ in valence i.e. an attitude can be positive, negative or neutral and can differ in strength (Abrahams, 2015; Guitar, 2018).

Operational Definition:

A predisposition or a tendency of the parent to respond positively, neutrally or negatively towards speech delay, attitude influences an individual's choice of action and responses to speech delay.

Chapter two

Review of Literature

Chapter Two
Review of Literature

2.1. History and Background of Speech Delay:

2.1.a. History of Speech Delay:

When the American Academy of Speech Correction was founded in 1926, speech pathology began to gain respect in the 1920s. As speech therapy approaches became more common over the next two decades, it began to take shape. At the time, World War II was in full swing, and men were returning home with head injuries. Speech pathology researchers worked with them through therapy because this was becoming an issue (Revita, 2022).

A speech pathologist is an expert in language and sound communication. They study speech, language, voice, fluency, and swallowing in people of all ages. It wasn't until the late 1960's that a distinction between speech disorders and language disorders was recognized. A speech disorder is identified as when someone has a hard time producing speech sounds and stuttering occurs. A language disorder is when someone has trouble understanding others and can't share their own thoughts and feeling (Leung & Kao, 2022).

2.1.b. Background of Speech Delay:

Most children learn to express themselves without much effort in their first two or three years of life, but others do not, and some do not learn to express themselves in the first two or three years of life. These children are typically seen in the early years. Having a language delay or being language-delayed is a term that is used to describe someone who is unable to communicate effectively. This indicates that they are improving their linguistic skills. Children's brains develop at a far slower rate than their peers'. a similar age group (Ambrose, 2022).

Children with speech and language delays have more difficulties reading, writing, paying attention, and socializing. For children who do not perform as predicted a full developmental evaluation is required for speech and language milestones, because unusual language is common. Other

physical and developmental disorders can manifest initially, and development can be a subsequent symptom.as well as linguistic issues (Mclaughlin, 2011).

Disturbances in voice, articulation, and fluency are all symptoms of speech problems. Stuttering, cluttering, delayed speech, and dyslalia are some of the most prevalent speech issues. It's possible that the deficiency is due to a lack of this occurs in both ordinarily developing and stuttering individuals (Institute, 2006).

From high-quality interactions with their parents and caregivers, most children learn communication skills (e.g., pointing, gesturing) and language abilities (e.g., pronouncing words, following directions). Some children, however, may have difficulty learning language for a variety of causes, including genetic, neurologic, and environmental factors. The word "language impairment" refers to persistent difficulties in learning a language. or the use of vocabulary that is well below age norms in written or spoken form (Law et al., 2019).

The development of parent–child interactions is dependent on parental perceptions. Understanding how parents view language development is important. difficulties, and assistance would allow speech and communication to take place. Language therapists should be more sensitive to the needs of people with disabilities. It would result in a decrease in the possibility of parents misinterpreting the goals in addition to the therapeutic procedures (Safot, 2017).

Dispel widespread assumptions about why youngsters are late talkers. Some individuals have mistakenly assumed that a child delayed language development is due to a lack of stimulation. "Either because they aren't spoken to enough or because their household setting isn't adequate," this is certainly not the case, and

many parents will be reassured by these findings." a comment on their parenting or the intelligence of their child (Barre et al,, 2011).

Language delay is often distinguished from a speech delay and other communication issues that do not influence language. It can occur on its own, but it's usually accompanied by something else. Other conditions can develop on their own, although they're often linked additional circumstances (Law et al., 2019).

The United States preventive services task force determined that there was inadequate evidence to recommend for or against the routine use of brief, formal screening instruments in primary care to detect speech and language delays in children up to the age of five years of old (Binu et al., 2014).

Children are nowadays heavily reliant on technology. However, excessive use of technology has a negative impact on children's speech development. The latter is one of the most important indicators of significant cognitive development and educational achievement in children during their school years. A great era is defined as a span of nine to twenty-four months (Nugraha, 2019).

2.2. Stages of Speech Process:

The temporal envelopes of sounds contain critical information for speech understanding. When listening to speech, cortical activities, especially those in auditory cortex, can temporally track the acoustic envelopes. The strength of cortical envelope tracking may reflect the extent of the speech processing. However, the acoustic signals without speech intelligibility (i.e. time-reversed speech or music) could also be well track-ed by the cortical activities (Xu, et al., 2021).

The process of pronunciation or speech takes place in three stages: these are receiving stage, processing stage , and transmitting stage. Each stage has its own devices that perform specific tasks related to that stage (Tomblin, 2014).

2.2.a. First: The receiving stage:

The central nervous system consists of the brain and spinal cord, and the human brain is divided into almost identical hemispheres, the right lobe, and the left lobe, and these two lobes connect many specialized nerve cells called verve fibers or the hard body as shown in the figure (Bishop, 2014).

The main device at this stage is the hearing device, which consists of three parts: the outer ear, the middle ear, and the inner ear during this stage, sounds from the surrounding environment are received, converted into nerve impulses, and then transmitted through the auditory nerve to special areas in the brain to be processed and perceived as sounds (Humphreys et al, 2020).

2.2.b. Second: The processing stage:

The primary system at this stage is the nervous system and is divided into two main parts, the central nervous system and the peripheral nervous system or peripheral, and language processing and speech production are among the most complex processes, as they occur as a result of an integrated work of the nervous system, where they combine a large group of brain regions and neurons the sensory and kinetic ones in this process and the talk about the function of each of these areas and cells and the differentiation of each area separately has been done with the aim of clarifying its role in language processing and speech production (Ismailova, 2017).

2.2.c. Third: Transmitting stage:

The peripheral nervous system consists of cranial nerves and spinal nerves, and these nerves perform two basic functions. Transferring sensory information from the body’s organs to the brain so that the brain interprets what these organs feel (Charles, 2020).

The central nervous system consists of the brain and spinal cord, and the human brain is divided into almost identical hemispheres, the right lobe and the left lobe, and these two lobes connect many specialized nerve cells called nerve fibers or the corpus sclera. These fibers are distributed to all areas of the body, as they connect the brain to the organs of the body, and among these organs are the organs of speech such as the tongue and vocal cords. These nerve days transmit nerve impulses from the brain to these organs to move them in a certain way to produce sound and then speech (Brown, 2019).

Transferring motor information from the brain to the body's organs, and then the organs respond to this information (Charles, 2018).

2.3. Language centers in the brain:

Each of the two parts of the brain is specialized in carrying out certain functions, and that each part is complementary to the other. It was also observed that the vast majority of people (about 95%) have most of their language centers in the left lobe where language processing is carried out, and for the remaining percentage (about 5%), their language centers are located in the right lobe, and this confirms the number of people who they use the right hand to write as the left hemisphere is dominant, which proves that the left hemisphere of the brain controls language. Also having some cases in which the left part of the brain suffered a stroke or as a result of accidents, which led to the injury of these people with language disorders (Brown, 2014).

The right hemisphere of the brain plays an important role in processing linguistic information. Injury to this part leads to difficulties in understanding nonverbal language as well as difficulties in the manifestations of social language. Language centers are located in the left hemisphere of the brain and are connected to each other by specialized neurons (Senders et al, 2019, Campbell, 2018).

2.3.1. Broca district:

This region is attributed to its discoverer, neuroscientist Paul Broca, and is located in the front of the left hemisphere of the brain in the frontal lobe. It is responsible for executing the kinesthetic process of speech. It is responsible for the formation and construction of words and sentences, the use of plural signs and the form of verbs choosing functional words as prepositions and conjunctions the function of Broca's area is explained by its proximity to the area responsible for controlling the movement of the body, as well as controlling the muscles of the face, jaw and tongue and the larynx (Brewer, 2016).

2.3.2. Fernk district:

This area is attributed to its discoverer, the surgeon Karl Wer nick, and this area is located near the main auditory area in the back of the lobe temporal it receives auditory inputs, which is the area responsible for understanding and interpreting speech. It prepares meanings, interprets and selects vocabulary in order to produce camels. Broca's and Ferenc's area are connected by a bundle of nerve fibers known as the arcuate bundle (Saeed et al., 2018).

2.3.3. Angular gyrus:

This area is located at the bottom of the parietal lobe behind the Wernicke's area and in front of the visual receptor areas and is the area responsible for stimulus conversion from visual to audio form. It facilitates the function of visual reading and everything that needs to be associated with visual stimuli and speech areas. This region also plays an important role in the connection between the spoken form of language and its perceived image, naming things and comprehending the written form of the language (Byeon and Hong, 2015).

2.3.4. Auditory zone:

This region is located in the posterior part of the temporal lobe in the front of Ferenc's area and receives the incoming sounds through the eighth auditory nerve. The region responsible for recording sounds with all their characteristics (frequency, intensity, and composition) (Byeon and Hong, 2015).

2.4. The assimilation and production of speech in the brain:

2.4.1. Speech comprehension:

The nerve impulses generated in the inner ear reach the auditory region of the brain via the auditory nerve, and then these impulses are sent by specialized neurons to the Wernicke area, where the audible speech is interpreted and understood (Marco, 2014).

When the audible speech is associated with a specific perception, a neural message is sent to the angular gyrus area, where the perception is converted into a visual stimulus that can be perceived in the visual area (Tomblin, 2014).

2.4.2. Speech production:

When we want to start the process of producing speech, speech is taken from Ferenc's area and then sent through the arcuate fiber bundle to Broca's area, which in turn determines the motor form of this speech and then sends messages from Broca's area to the motor area.to coordinate and control the shape of the speech organs and the vocal apparatus to produce this speech (Brown et al., 2019).

2.4.2.a. Read the written word:

The information is transmitted from the eye through the optic nerve to the visual area of the brain and then transmitted to the angular gyrus that connects the visual and auditory form of the word stored in the Wernicke area and then the information is transmitted through the bundle of arcuate fibers to Broca’s area to determine the motor form of the word and then send

Commands to the motor area to take the speech organs and the vocal apparatus in the appropriate form for this word to be produced (Marco, 2004).

2.4.2.b. When pronouncing an audible word:

The information is transmitted from the inner ear through the auditory nerve to the auditory region of the brain and then transmitted to the Wernicke area to be understood and perceived, and then this word is sent through the arcuate fiber bundle to Broca's area to take the motor form of the word, which in turn sends commands to the motor area for coordination And control the shape of the speech organs and the vocal apparatus to pronounce this word (Nugraha et al., 2019).

2.5. Speech Development Milestones:

With age, the percentage of a child's speech that should be comprehensible to a stranger without any context signals grows (Mclaughlin, 2011).

If the child is achieving particular milestones depending on their individual speech and language skills developing within a range of time rather than at exact ages, then the child may have a speech or language delay (Byeon and Hong, 2015).

As a result, even if the children are a little behind schedule, their development may be affected. Continue to be develop normal. These dates are simply meant to serve as guidelines for when the majority of the work is completed. Certain language skills are developed in children. Indeed, the National Institute on Deafness and other Communication Disorders reports that these benchmarks were created to assist surgeons and other healthcare professionals in determining if a patient is ready for surgery. If your child is on track or if they require additional assistance Here's a rundown of a child's developmental milestones (Logsdon, 2020).

Table (2-1): Milestones that demonstrate normal speech development:

Milestones that demonstrate normal speech development include:

Age	Language Level
Birth	Cries
2-3 months	Coos in response to you, smiles
6 months	Babbles, turns and looks at new sounds
8 months	Responds to name, pats self in mirror
10 months	Shouts to attract attention, says a syllable repeatedly
12 months	Says 1-2 words; recognizes name; imitates familiar sounds; points to objects
12-17 months	Understands simple instructions, imitates familiar words, understands "no," uses "mama" "dada" and a few other words
18 months	Uses 10-20 words, including names, starts to combine 2 words "all gone," "bye-bye mama," uses words to make wants known "up" "all done" or "more;" knows body parts
2 years	Says 2-3 word sentences; has >50 words, asks "what's this" and "where's my" vocabulary is growing; identifies body parts, names pictures in book, forms some plurals by adding "s"
2 ½ years	Gives first name; calls self "me" instead of name; combines nouns and verbs; has a 450 word vocabulary; uses short sentences; matches 3-4 colors, knows big and little; likes to hear same story repeated
3 years	Can tell a story; sentence length of 3-4 words; vocabulary of about 1000 words; knows last name, name of street, several nursery rhymes, can sing songs
4 years	Sentence length of 4-5 words; uses past tense; identifies colors, shapes; asks many questions like "why?" and "who?" Can speak of imaginary conditions "I hope" Uses following sounds correctly: b, d, f, g, h, m, n, ng, t, w, y (as in yes)

(Mondal et al., 2016)

Table (2-1) shows that the speech and language growth milestones. It is critical for the physician to have an understanding of the situation. To the determine whether these milestones have been met speech development is delayed. Normal cooing, and babbling are all stages of speaking. Typical language uses words and word combinations advances thro-ugh stages of comprehension and expression of more complicated concepts (Mclaughlin, 2011).

Children learning during this period is a reliable predictor of individual differences in speech and language skills later in life (Zhao and Kuhl, 2022).

Milestones for this disorder can be recalled by using the "rule of fours": if the age of the child in years is divided by four, the quotient is approximately equal to the amount of speech that should be unders-tandable. Thus, a one-year-old should be understandable 25 percent of the time, a two-year-old 50 percent of the time, a three-year-old 75 percent of the time, and a four-year-old close to 100 percent of the time (Mclaughlin, 2011).

2.6. Signs of Speech Delays in Infants:

Speech with gross and fine motor skills, social and personal skills, activities of daily living, and cognition, are two of the main areas of child development, or neurodevelopment. These domains are distinguished by continuous, which means that one end of the diagnostic spectrum has a normalcy border (Wiefferink et al., 2020).

2.6.1. Birth to 18 Months:

During this period, speech delay may be a concern if the child:

Has limited eye contact or does not respond to sounds in her environment.

Does not babble or make buzzing, bubbly noises with lips.

Does not respond to sing song play with others.

Does not appear to listen or be concerned with words of caregivers, or siblings.

Does not make common gestures such as pointing toward a wanted object, and waving bye or in greeting.

Appears uncomfortable, and crying often in a whining manner.

2.6.2. Toddlers from 18 to 24 Months:

During this period, speech delay may be a concern if the child:

Continues to show little eye contact with caregivers, and other children.

Appears to show a limited range of emotions.

Has not begun to say single words for common people and objects.

Can’t point to two or three major body parts such as his head, arms, feet, or legs. Doesn’t point to familiar objects or people when asked or can’t point to pictures of common objects when asked. Seems uninterested in her environment. Doesn’t’ try to get others' attention or interaction (Uysal and tura, 2019).

2.6.3. Toddlers from 24 to 36 Months:

During this period, delays may be a concern if the child:

Can’t point to or say the names of common objects in her environment.

Doesn’t say simple sentences such as "want milk," "Da-da's home," or "nottime go bed". Doesn’t enjoy listening to stories or following along in a book. Isn’t interested in children's television shows. Is more difficult to understand than other children his age (Logsdon, 2020).

2.7. Type of speech delay:

There are two mine types of speech delay:

2.7.1.Receptive delay:

The inability to decode or understanding speech.

2.7.2.Expressive delay:

The inability to generate speech. Developmental language disorders (DLD) affect the majority of children with speech problems. Some children may have a combined expressive/ receptive delay. The good news

is that these children are more likely to meet visual-motor milestones, as well as respond to others' linguistic skills (Langbecker et al., 2020).

'Late-comers' Youngsters who start talking later, use fewer words, and use fewer word combinations than other children are known as late talkers. The number of words they use or understand may be delayed in these children. According to studies, up to 13% of children are deemed late talkers (Wooles et al., 2018).

The majority of children with speech delays have developmental language disorders (DLD) The term for this is expressive delay. Children with expressive delays will meet age-appropriate visual-motor milestones. These children will appear to be normal, with specialized intervention and a fair prognosis speech by the time they begin, most of these children will have improved speech. Their speech will eventually return to normal in school linguistic abilities (Garcia, 2004).

2.8. Causes of speech delay

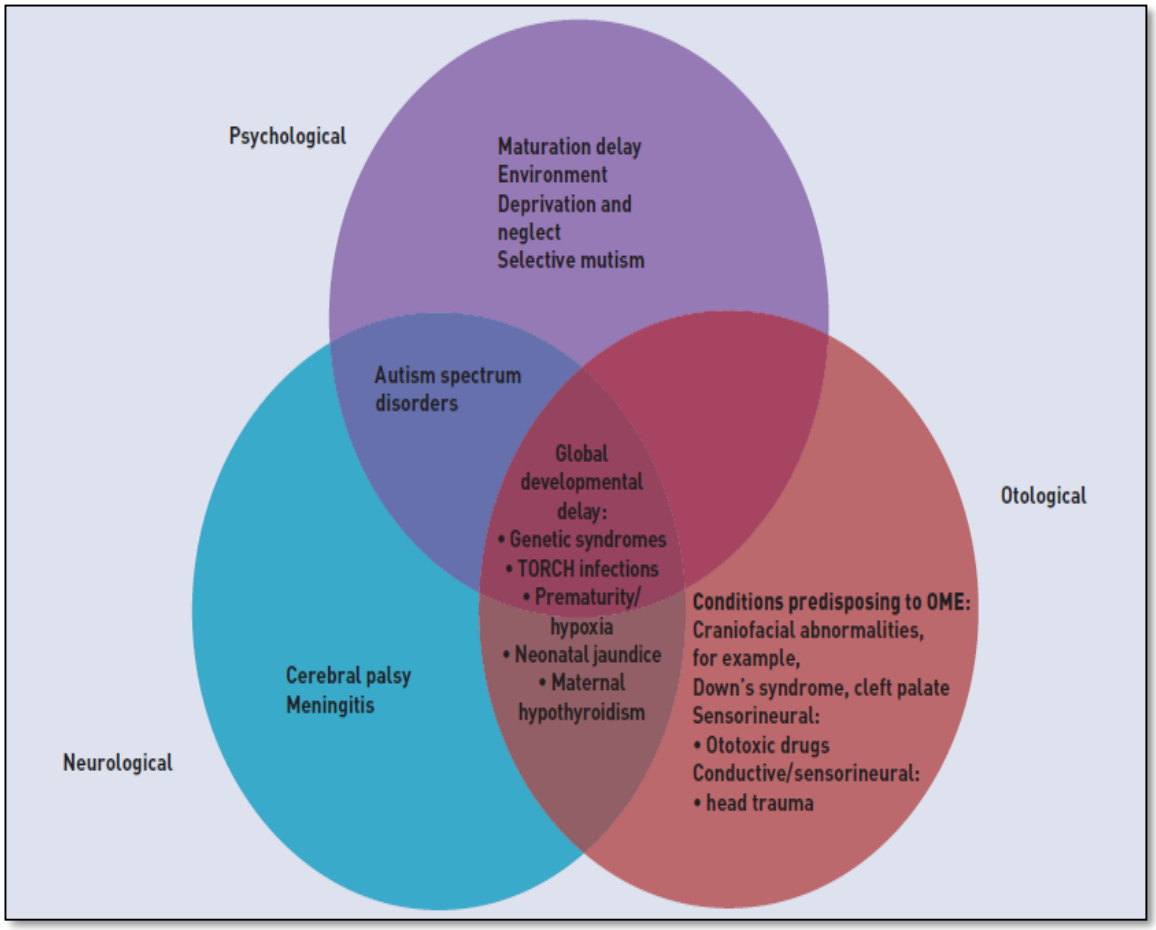

Figure (2-1). Venn diagram demonstrating the different causes of speech and language delay (adapted from the Oxford Handbook of Paediatrics 4). OME = otitis media with effusion. TORCH = toxoplasmosis, rubella, cytomegalovirus, and herpes simplex

(Wooles et al., 2018).

The delay in speaking could be a normal (and brief) stage of development for the child or the first sign of a mental, neurological, or behavioral disorder (Rvachew et al., 2007).

Speech delay has been blamed on intellectual disability, hearing loss, language development delay, verbal incoherency, Autistic Spectrum Disorder (ASD), bilingualism, and a lack of psychosocial stimuli (Wooles et al., 2018).

2.8.1. Intellectual disability:

The most common reason for speech delay is mental disability, which accounts for more than half of all instances. A child with intellectual disability has a worldwide language delay, as well as delayed auditory comprehension and gesture use. The slower learning of communicative speech is, the more severe the mental impairment. Speech development is significantly delayed in mentally impaired children compared to other developmental areas. Even after careful study, the cause of intellectual disability can't be discovered in around 30 to 40% of children with mental retardation. Genetic defects, intrauterine infection, placental insufficiency, maternal medication, central nervous system trauma, hypoxia, kernicterus, hypothyroidism, poisoning, meningitis or encephalitis, and metabolic disorders are all known causes of mental retardation (Leung and Kao, 2020).

2.8.2. Hearing loss:

Hearing loss (HL) in infancy and early childhood is a well-known factor in delayed speech and language development because it limits a child's availability to speech and language input. This restriction in access can range

from minor in moderate HL to practically full in children with severe to profound HL, with negative consequences for speech and language development (Tomblin et al., 2014).

2.8.3. Maturation delay (developmental language delay):

Maturation delay (developmental language delay) is responsible for a large proportion of late talkers. The maturation of the central neurologic mechanism required for speech production is delayed in this disorder. The issue is more common in boys, and there is often a family history of "late bloomers." However, the prognosis for these youngsters is favorable; by the time they start school, they usually have normal speech development (Leung, 2022).

2.8.4. Expressive language disorder (developmental expressive aphasia):

The use of speech in children with expressive language disorder (developmental expressive aphasia) doesn't really develop at the expected age. To supplement their limited expression, these children may employ gestures. The most prevalent reason of speech delay is maturation delay, which accounts for just a tiny number of cases (Leung, 2022).

2.8.5. Bilingualism:

The onset of both languages may be delayed temporarily in a bilingual home environment. The comprehension of the two languages by the bilingual child is normal for a child of the same age, and the youngster usually becomes fluent in both languages before the age of five (Sidhu et al, 2013).

2.8.6. Psychosocial deprivation:

Psychosocial deprivation can have long-term effects on speech capacity, even in children as young as 18 years old. Psychosocial deprivation is a significant predictor of impaired speech development (Nguyen, 2020).

2.8.7. Autism:

Autism spectrum disorder (ASD) is a developmental disability caused by differences in the brain. People with ASD often have problems with social communication and interaction, and restricted or repetitive behaviors or interests. People with ASD may also have different ways of learning, moving, or paying attention. It is important to note that some people without ASD might also have some of these symptoms. But for people with ASD, these characteristics can make life very challenging (Leung, 2022).

Speech difficulties are common in children with autism, but they do not necessarily indicate that your child has autism. Autistic speech difficulties are frequently associated with other communication issues, such as a lack of gestures, a refusal to reply to their name, and a lack of interest or interacting with others reasons (Gleick, 2019).

Child with autism will have several effect on social communication and interaction skills can be challenging for people with ASD. Child - Human Age, Waving - Gesture, Child, Happiness, Looking at camera Examples of social communication and social interaction characteristics related to ASD can include:

Avoids or does not keep eye contact, does not respond to name by 9 months of age, does not show facial expressions like happy, sad, angry, and surprised by 9 months of age, does not play simple interactive games like pat-a-cake by 12 months of age, uses few or no gestures by 12 months of age (for example, does not wave goodbye), does not share interests with others by 15 months of age (for example, shows you an object that they like), does not point to show you something interesting by 18 months of age, does not notice when others are hurt or upset by 24 months of age, does not notice other children and join them in play by 36 months of age, does not pretend to be something else, like a teacher or superhero, during play by 48 months of age, does not sing, dance, or act for you by 60 months of age, delayed in

language skills and delayed cognitive or learning skills (Elmasry et al., 2020).

2.8.8. Elective mutism:

Elective mutism is a condition in which children refuse to speech or make conversation for personally reasons. Children with elective mutism will typically speak when they are alone, with their friends, and occasionally with their parents, but not at school, in public, or with strangers. Girls are slightly more likely than boys to get the disorder. A large percentage of youngsters who choose to be mute also have articulation or language problems. Mutism is generally caused by family psychopathology. Other signs of poor adjustment in electively mute children include bad peer interactions and overdependence on their parents. These children are typically pessimistic, introverted, timid, and withdrawn. The condition might last for months or even years (Elmasry et al., 2020).

Also refers to a refusal to speak in almost all social situations (despite normal ability to do so), while selective mutism was considered to be a failure to speak in specific situations and is strongly associated with social anxiety disorder. In contrast to selective mutism, it was thought someone who was electively mute may not speak in any situation, as is usually shown in books and films. Elective mutism was often attributed to defiance or the effect of trauma. Those who are able to speak freely in some situations but not in others are now better described by selective mutism (Fan et al., 2021).

Though elective mutism is no longer recognized by most psychiatrists, it is a popular character element or plot point in stories and movies. Many characters choose to stop speaking, for various reasons. Even more commonly, there are also characters who stop speaking after a traumatic incident. In both these cases, often, and almost always in the second, the character is silent in all situations. This is therefore not selective mutism, and anxiety is very rarely involved. Selective mutism itself is almost

nonexistent in pop culture (Elmasry et al., 2020).

Elective mutism It usually starts during childhood and, if left untreated, can persist into adulthood. A child or adult with selective mutism does not refuse or choose not to speak at certain times, they're literally unable to speak. The expectation to talk to certain people triggers a freeze response with feelings of panic, like a bad case of stage fright, and talking is impossible. In time, the person will learn to anticipate the situations that provoke this distressing reaction and do all they can to avoid them. However, people with selective mutism are able to speak freely to certain people, such as close family and friends, when nobody else is around to trigger the freeze response. Selective mutism affects about 1 in 140 young children. It's more common in girls and children who are learning a second language, such as those who've recently migrated from their country of birth (Leung, 2022).

Selective mutism usually starts in early childhood, between age 2 and 4. It's often first noticed when the child starts to interact with people outside their family, such as when they begin nursery or school. The main warning sign is the marked contrast in the child's ability to engage with different people, characterised by a sudden stillness and frozen facial expression when they're expected to talk to someone who's outside their comfort zone. They may avoid eye contact and appear:

Nervous, uneasy or socially awkward, rude, disinterested or sulky, clingy, shy and withdrawn, stiff, tense or poorly co-ordinated, stubborn or aggressive, having temper tantrums when they get home from school, or getting angry when questioned by parents, More confident children with selective mutism can use gestures to communicate – for example, they may nod for "yes" or shake their head for "no". But more severely affected children tend to avoid any form of communication – spoken, written or gestured (Roberts et al., 2019).

2.8.9. Receptive aphasia:

Wernicke's aphasia and Wernicke's area are named after the German neurologist Carl Wernicke who first related this specific type of speech deficit to a damage in a left posterior temporal area of the brain (Roberts et al., 2019).

The primary issue in receptive aphasia is a loss in spoken language understanding; this handicap causes production issues and speech delay. Nonverbal auditory stimuli produce typical responses in children with receptive aphasia. Such children are frequently described by their parents as "not listening" rather than "not hearing." these children's speech is not only delayed, but also sparse, agrammatic, and articulation is indistinct. Most children with receptive aphasia develop their own language over time, which is only understandable by people who are familiar with it (Leung, 2022).

the ability to grasp the meaning of spoken words and sentences is impaired, while the ease of producing connected speech is not very affected. Therefore, Wernicke's aphasia is also referred to as 'fluent aphasia' or 'receptive aphasia'. Reading and writing are often severely impaired. As in other forms of aphasia, individuals can have completely preserved intellectual and cognitive capabilities unrelated to speech and language. Persons with Wernicke's aphasia can produce many words and they often speak using grammatically correct sentences with normal rate and prosody. However, often what they say doesn't make a lot of sense or they pepper their sentences with non-existent or irrelevant words. They may fail to realize that they are using the wrong words or using a non-existent word and often they are not fully aware that what they say doesn't make sense (Roberts et al., 2019).

Patients with this type of aphasia usually have profound language comprehension deficits, even for single words or simple sentences. This is because in Wernicke's aphasia individuals have damage in brain areas that are important for processing the meaning of words and spoken language.

Such damage includes left posterior temporal regions of the brain, which are part of what is known as Wernicke's area, hence the name of the aphasia (Fan et al., 2021).

2.8.10. Cerebral palsy:

Cerebral palsy is the name for a group of lifelong conditions that affect movement and co-ordination. It's caused by a problem with the brain that develops before, during or soon after birth. Also cerebral palsy is a condition that affects the brain, a movement disorder caused by brain damage (Tomblin, 2014).

The symptoms of cerebral palsy are not usually obvious just after a baby is born. They normally become noticeable during the first 2 or 3 years of a child's life. Symptoms can include:

delays in reaching development milestones – for example, not sitting by 8 months or not walking by 18 months, seeming too stiff or too floppy, weak arms or legs, fidgety, jerky or clumsy movements, random, uncontrolled movements, walking on tiptoes, a range of other problems – such as swallowing difficulties, speaking problems, vision problems and learning disabilities, the severity of symptoms can vary significantly. Some people only have minor problems, while others may be severely disabled (Roberts et al., 2019).

2.8.11. Physical Impairments:

Physical Impairment in the context of the Americans with Disabilities Act (ADA) of 1990, any physiological disorder, condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems that substantially limits one or more major life functions. Those body systems are neurological, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitourinary, hematic and lymphatic, skin, and endocrine (Roberts et al., 2019).

Hearing loss (HL) in infancy and early childhood is a well-known

factor in delayed speech and language development because it limits a child's availability to speech and language input. This restriction in access can range from minor in moderate HL to practically full in children with severe to profound HL, with negative consequences for speech and language development (Tomblin, 2014).

child with physical impairments may have difficulties with mobility, manual dexterity and speech. Some would use a wheelchair all or some of the time. They might need support with personal care. Some physical impairments are fluctuating in impact and, as with all disabled students, it is important to talk to the student about what is most useful to them (Chesov, 2021).

2.9. Risk factors of speech delay:

According to the US preventive services task force, potential risk factors for speech and language problems include: gander, prematurity, low birth weight, congenital abnormalities, family history of speech or language problems, and parents with lower levels of education (Sara, 2017).

Male children made up 70.7 percent of those who presented with a complaint of speech delay (Garcia and white, 2004).

It is true that young girls learn language more quickly than young boys. Girls outnumber boys in the use of gestures between the ages of 10 to 24 months. They also use and blend words more frequently than boys. Gender differences can be found in a variety of languages and cultures. From one to two years of age, the gender difference widens, although it may not precede. Among the ages of three and six, girls continue to outnumber boys, although the difference narrows. Boys and girls do equally well on vocabulary assessments by age nine, according to some research, and the gender advantage in vocabulary switches disappears by age ten years (Roberts et al., 2019).

Children have worse language ability. This decline persists when only school-aged children are considered, implying that their struggle is ongoing (Natalie, 2011).

Low birth weight has been linked to a higher risk of cognitive impairments, speech and language impairments, attention problems, social difficulties, hyperactivity, and learning impairments (Chesov, 2021).

Speech language delay has been linked to a multilingual family environment, a positive family history of speech language delay, consanguinity, poor father education, and low maternal education (Sunderajan and Kanhere, 2019).

Virtual exposure has been identified as one of the causative variables in language and speech development delays, according to the literature. Because of the limited time span, they spent for interactive communication with their peers and families, it has been reported that speech delay is more frequently encountered in children who grown-up by passing time with electronic media such as watching television, chatting on the phone, surfing on tablet, and internet (Catani and Jones, 2005).

2.10. Speech therapy

Primary speech and language delay/disorder is a common developmental issue that, if left untreated, can lead to learning and socialization issues that endure well into adolescence and beyond (Low, 2003).

There are no uniform rules or consistent data on which to base a decision for children with primary speech delay/disorder, hence the decision is often left to individual therapists and providers (Law, 2019).

Children learn language through interaction with other children as well as their parents and other adults (Yana,2019).

Early detection and management can help to alleviate the emotional, social, and cognitive disadvantages associated with this disability, as well as improve the result (Fan et al., 2021).

Every speech intervention is meant at improving expressive or receptive phonology (the production or understanding of speech sounds), expressive or receptive vocabulary (the production or understanding of words), or expressive or receptive syntax (the production or understanding of sentences) production or understanding of sentences and grammar (Wallace et al., 2015).

The priority is to identify the underlying cause of speech delay, which will guide management. Hearing loss is a potentially reversible cause in the setting of OME with adequate care, hence all children with suspected speech delay should be referred for audiometry to rule it out (Fan et al., 2021).

Global developmental delay and psychiatric problems such as autism spectrum disorder are two further causes that should not be overlooked, both of which will necessitate a multidisciplinary approach with improved prospective results for the child if assistance and treatment are provided early. These children will eventually require assistance from a child development center (Watson et al., 2010).

Speech and language delay/disorder therapies can take many different forms due to the wide range of challenges within the diagnosis. The therapist may take an eclectic approach and adjust therapies based on the child's response. These concepts give a good foundation for describing intervention approaches (Sahli et al., 2018).

There are no consistent data or uniform ruler on which to base a decision for children with primary speech delay/ disorder, hence the decision is often left to individual providers and therapists (Senders et al., 2019).

2.10.1. Parent's Role in Speech Therapy:

As a district the Needham Public Schools Speech and Language Pathologists would like to provide child parents with some ideas to enrich with child’s day with language while child and family at home. The Needham Public Schools give parents some general suggestions, using items

already have at home: like (read, play games, check out some apps and talk about the activities parents are doing). Home parents activates in speech therapy:

A. Reading Books

Read books or story to child. Start reading when child is a baby. Look for age-appropriate soft or board books or picture books that encourage child to look while parents name the pictures for the child. Also read books with child and talk through them. And parents can ask them:

What they think the story could be about (just by looking at the front cover and title). What they think might happen next in the story. To think of another way the story could have ended. To tell parents how the characters in the story feel and why. To tell the story again (without looking at the book) to their siblings. Use books to teach vocabulary. Have the child point to items that parents label. Use books to work on following directions. Give the child 2 step directions (e.g., Point to the monkey then point to the giraffe). Use books as a description/labeling activity. Describe an animal then have the child name it. (e.g., Tell me the animal on this page that is big, grey and has a trunk) (Fan et al., 2021).

B. Communication with child:

Parents may also engineer opportunities for the child to motivate them to interact and communicate. This involves creating situations in their environment in which they would be motivated to initiate communication. Such situations include:

Placing an item that the child likes within sight, but out of reach. Introducing toys that are hard to operate, or within a tightly closed box. Doing something unexpected (e.g. passing the child something different from what they need). Offer an item in parts (e.g. giving the child juice a little at a time). Offer the child choices by presenting them with a few items.

Wait and see what the child will do when they need help. Stop during a routine or song and observe how the child reacts (Leung, 2022).

The child may respond to these situations through a variety of non-verbal communication modes (e.g. look at parents, make sounds, reach out to an item, or appear excited). child can respond by interpreting their actions and expressions and giving them what they want (e.g. "Do you want the juice? Here you go" (Leung and Kao, 2020).

Also child may have difficulty understanding and using spoken language due to their underlying condition. When speaking to the child, parents must be encouraged to support communication with gestures (e.g. Pointing to objects, key word sign), pictures (e.g. books), and body language (e.g. facial expression, body posture). The child will have a better understanding of message when parents deliver it both verbally and non-verbally. They may also adopt these means of non-verbal communication to enhance the clarity of their communication (Logsdon, 2020).

C. Playing Games

Use the games that already have at home to work on language skills. Here are some ideas:

Scattergories/ Scattergories Junior: Teams work to come up with different members of different categories (ie. sports, desserts, winter clothes). The twist is that each thing parents name has to start with a certain letter. This game works on the understanding of categories and how words go together. Second Rule/5 Second Rule Junior: In this fast-paced game, the job is to name three items of a given category in just five seconds (Leung and Kao, 2020).

This game works on our understanding of categories, word associations، and thinking on child toes. Headbanz: Every player has a picture on their forehead that they cannot see. child job is to guess what is on your head by asking yes/no questions. This game works on our understanding of categories and item features. (Logsdon, 2020)

Alternative play: Instead of asking and answering questions, players can instead describe the pictures to each other. For instance, provide a description such as, “You are a type of transportation that travels in the sky.” Heads Up: This is a smartphone app that is very similar to Headbanz. Players hold the phone up to their forehead and a word is displayed (Leung and Kao, 2020).

The other players have to describe this word in order to get the player whose turn it is to guess the word correctly. Alternative play: Parents can also use gestures/act it out to get the player to guess the correct word. The app has a feature that video tapes the players acting it out, too, which can be fun. Apples to Apples/Apples to Apples Junior: In each round of this game, a judge puts down a green (adjective) card. All the other players play a red (noun) card that “goes with” the adjective word on the green card. The judge decides which red card is the best (Fan et al., 2021).

The person who put down that card wins the round. This game works on word associations and parts of speech. Clever players think about the judge’s personality and perspective when putting down a card, too. Alternative: Add in this fun element - each player must make an argument as to why their red card is the best match. This adds in work with creating clear arguments, reasoning, sentence formulation, and public speaking. Taboo: child job is to get your team to guess a certain word by giving clues and describing the word on the card (Leung and Kao, 2020).

The twist is that there is also a list of ‘taboo’ words that parents cannot use in the description in (Alternative) below. Alternative: Instead of worrying about the ‘taboo’ words, use them to help parents in the descriptions. As child get better at formulating good descriptions, then try playing the true way where child cannot say the ‘taboo’ words. Guess Who: Try to guess which character card child opponent has by asking yes/no questions. This game works on vocabulary, item features, asking questions, and process of elimination (Leung, 2022).

Blurt: This game works on listening skills and vocabulary. Listen to a description of a word and "blurt" out the correct word. If you're the first one to blurt it, you advance on the game board. The first player to make it around the board wins. Bubble Talk: Match funny or very silly pictures with funny captions. This helps children try to figure out the best title for pictures. Practice creating grammatically-correct sentences and explaining why something happened while also getting a good laugh (Leung and Kao, 2020).

Rhyme Out: Players take turns drawing cards from the box and reading three clues aloud. The other players try to be the first to answer with three rhyming words that match the clues. Rory's Story Cubes: Roll the cubes and make a story about the pictures get. Parents can use just one or two cubes to inspire a story, or try to make a story using all the pictures you have. Follow a story frame such as Somebody-Wanted-But-So-Then to give it a little more structure. Go-Fish and Memory: Great ways to work on describing and grammar (Fan et al., 2021).

When playing Memory, have the child use a complete sentence to describe their match. Use a deck of cards for Go-Fish that can provide opportunities for more language. E.g., animal's cards: Do parents have something that swims in a bowl? Category catch: pick a category e.g. sports, verbs, TV shows, words beginning with B. When parents catch the ball, say something in the category. If parents repeat or hesitate, parents are out. Alphabet categories: pick a category e.g. animals. Try to name something in the category for every letter of the alphabet. Like (A. apple, B. boll, etc.) (Fan et al., 2021)

What am I: Put a post-it with a person or object on someone's head. They ask yes/no questions to guess what is on their head. Bananas for dinner: First person says 'I am going to have bananas for dinner'. Each person repeats the list and adds on a food 'I am going to have bananas and cereal for dinner', then 'I am going to have bananas, cereal and peas for

dinner'. If you forget, you are out. Audio tape + draw: Listen to an audio tape. Draw what is happening as you listen. Read + draw: Read a paragraph of a book. Stop and draw what you think happened in the paragraph. Predict what will happen next. Read the next paragraph to see if your prediction was right. Treasure Hunt**:** This is a fun one that will encourage language use out of sheer excitement (Leung, 2022).

Ideas to Try:

Get out a bucket or a toy box and throw a bunch of toys in it. Close your eyes and go on a "treasure hunt". If you have a sandbox, bury toys in the sand and then go on a treasure hunt! As you and your child pull toys out of the box, name them and say something about them. For example, if you pull out a doll...say "doll, I found the little doll"! By playing this game with your child, you are modeling functional vocabulary words such as "dig" and "found." You are teaching irregular past tense verbs and personal pronouns with the phrase "I found". Blocks: Blocks are a wonderful way to develop motor and cognitive skills, but it can help to develop language too! Old school blocks are the best and the cheapest (Nguyen, 2020).

How to Play:

Play a game outside where you take turns starting to run by saying "go" and then say "stop" to freeze. If your child's listening skills are more advanced give directions such as "jump up and down until I say stop." By playing this game with your child, your child has to learn how to follow rules and work with other children. He/she has to listen to a direction or sometimes a 2-step direction. There are lots of teachable moments in this game and your child will be motivated to learn. Read, Read, Read: Can I say this enough :)? Your child can sit longer for a book. Use that time wisely (Chesov, 2021).

Ideas to Try

Ask your child to point to pictures as you read. Work on 2 step-directions - ask your child to point to a picture and then a second picture. For example, "Point to the dog and the house" or "Where is the boy and the car?" Ask some comprehension questions such as "who" and "what" after reading a page. Don't forget your free eBook! There are lots of great tips in it to make the most out of your reading time. By reading a familiar book and asking "following direction" questions, your child can really practice understanding those "directional" words such as "point to," "find," "then," etc...without having to learn new vocabulary too. Many children have trouble learning how to answer WH questions. Practicing this skill while reading is GREAT since you have a visual right in front of you to refer to! Also, you are introducing the idea of predicting what will happen next and discussing WHY (Marco, 2014).

D. Emotions and Feelings Games:

Act out these emotions and feelings. The other person guesses the emotion. Some are easier and some are harder. OR can you notice these emotions in a film that parents are watching (Chesov, 2021).

E. Word Games:

Would You Rather? Make up silly or serious questions and practice answering them by turning the question around, using complete sentences, and giving reasons why parents chose this answer. I Went To The… Pick a place and try to name all the things parents might see there. For example, “I went to the beach and saw a shovel, pail, towel, wave, whale, etc…” (Leung, 2022).

Letter Scavenger Hunt: Starting with A and working your way to Z, try to find all the letters of the alphabet on signs, packages, and everyday household items. Charades: Act out different animals, actions, jobs, etc. without making a peep. I Spy: Pick a secret item and give 3 clues to help the

partner guess your item Apps Food Frenzy: kids pretend to work in a restaurant and have to fulfill orders (Chesov, 2021).

Parents can customize the level, the concepts addressed, and the allotted time to complete the direction. Fun with Directions: touches on a variety of language concepts with varying levels of directions. All can be customized in settings. Webber Hear Builder Auditory Memory (hit "take a tour" on the bottom right hand side to access without making an account): As a spy, you catch villains by using active listening skills (Nguyen, 2020).

Comparative Adjectives: touch the item that matches the description. Articulation Station: provides flashcards with pictures for speech sounds at the word, phrase, sentence, and story levels. You can buy only the speech sounds your child is working on. Puppet Pals: you pick your puppet or upload your own photo and record a story about it. Lingo kids: great app to learn vocabulary, basic linguistic concepts Milo sequencing: put three picture events in order to practice sequencing skills Splingo: following directions - can be set to follow directions with 1-4 modifiers. Splingo categories: Sorting items into categories. Toca Boca: all of these apps are great for early learners (Marco, 2014).

F. Other Activities to Try:

Cook/Bake Something Together

Practice following the directions of a recipe. Use sequential language such as, "First we add the tomatoes, then we stir it all together, and last we add seasoning." Use spatial concept words such as in, on, on top, next to, as much as possible. Talk about the textures, tastes, smells, and colors of the foods. Use descriptive words (Roberts et al., 2019).

Use sidewalk chalk

Draw pictures using sidewalk chalk and have your child describe the pictures using color, shape, and size words. Draw a hopscotch game and write speech words in each square. These could be words your child is

working on pronouncing (ie. they contain their speech sounds) or ocabulary words that they then have to use in a sentence.

Watch a movie:

Use some of the same strategies as you would when you read a book. Ask your child questions about what is happening, why characters feel certain ways, what might happen next, etc. Talk about the different characters' personality traits. Compare and contrast the characters. Think of other ways the characters could have solved problems. Come up with silly solutions and talk about why they might not have worked (Marco, 2014).

Go on a scavenger hunt outside or inside:

Give your child descriptions of things to find in your home. These could be vague, such as, "Find something large and blue" or specific, such as, "Find something that you use to dry your hands." If your child is working on speech sounds, have them find items that contain their sounds and then have them label the item (Roberts et al., 2019).

G. Preschool Speech Development Activities:

Preschool speech development can strengthen by building listening and understanding skills. Each of these 11 below activities is fun and playful, while also building children's confidence while using their words. Using language and communication with young children is crucial for their success in school and beyond. Preschool speech development activities should be part of each day in the classroom, and also in the home (Marco, 2014).

When thinking about what types of activities to provide, keep in mind ways you can encourage young children to use their verbal skills. This can be done in so many fun, playful ways, building their confidence at the same time. Teachers and parents can help build listening and understanding skills by talking with them, listening to them, reading and singing with them. Flowing the preschool speech development activities:

Use singable books to strengthen verbal skills. Recite favorite fingerplays. Use a telephone in the dramatic play area. (Teach Preschool). Create story baskets to encourage preschoolers to retell stories. (Nurture Store). Play an I-spy game that encourages language participation. (Homeschool Preschool). Provide listening activities to build language skills. (Inspiration Laboratories). Play games that encourage speaking and listening skills. (Childhood 101). Build letter sounds by providing rhyming activities. (No Time for Flashcards). Encourage puppet play to create fun dialogue and interaction. (Empowered Parents). Play group games that encourage conversation. Add small groups to your classroom schedule that encourage preschoolers to use their verbal skills (Zengin et al., 2018).

H. Home activates with Age category:

Birth to 2 Years:

Encourage your baby to make vowel-like and consonant-vowel sounds such as "ma," "da," and "ba." Reinforce attempts by maintaining eye contact, responding with speech, and imitating vocalizations using different patterns and emphasis. For example, raise the pitch of your voice to indicate a question. Imitate your baby's laughter and facial expressions. Teach your baby to imitate your actions, including clapping your hands, throwing kisses, and playing finger games such as pat-a-cake, peek-a-boo, and the itsy-bitsy-spider. Talk as you bathe, feed, and dress your baby (Nguyen, 2020).

Talk about what you are doing, where you are going, what you will do when you arrive, and who and what you will see. Identify colors. Count items. Use gestures such as waving goodbye to help convey meaning. Introduce animal sounds to associate a sound with a specific meaning: "The doggie says woof-woof." Acknowledge the attempt to communicate. Expand on single words your baby uses: "Here is Mama. Mama loves you. Where is baby? Here is baby." Read to your child. Sometimes "reading" is simply

describing the pictures in a book without following the written words. Choose books that are sturdy and have large colorful pictures that are not too detailed. Ask your child, "What's this?" and encourage naming and pointing to familiar objects in the book (Zengin et al.,2018).

- **From 2 to 4 Years:**

There will be an immense growth in speech and language skills as a child turns 3 years old. This language growth sets the foundation for all communication, learning, reading, writing, speaking, listening, telling stories, making friends... the list goes on. It is important but yet fun to help the child to learn (Nguyen, 2020).

Use good speech that is clear and simple for your child to model. Repeat what your child says indicating that you understand. Build and expand on what was said. "Want juice? I have juice. I have apple juice. Do you want apple juice?" Use baby talk only if needed to convey the message and when accompanied by the adult word. "It is time for din-din. We will have dinner now". Make a scrapbook of favorite or familiar things by cutting out pictures. Group them into categories, such as things to ride on, things to eat, things for dessert, fruits, things to play with. Create silly pictures by mixing and matching pictures. Glue a picture of a dog behind the wheel of a car. Talk about what is wrong with the picture and ways to "fix" it. Count items pictured in the book. Help your child understand and ask questions. Play the yes-no game .

Ask questions such as "Are you a boy?" "Are you Marty?" "Can a pig fly?" Encourage your child to make up questions and try to fool you. Ask questions that require a choice. "Do you want an apple or an orange?" "Do you want to wear your red or blue shirt?". Expand vocabulary. Name body parts, and identify what you do with them. "This is my nose. I can smell flowers, brownies, popcorn, and soap". Sing simple songs and recite nursery rhymes to show the rhythm and pattern of speech.

Place familiar objects in a container. Have your child remove the object and tell you what it is called and how to use it. "This is my ball. I bounce it. I play with it" Use photographs of familiar people and places, and retell what happened or make up a new story (Yasin et al., 2017).

From 4 to 6 Years

When your child starts a conversation, give your full attention whenever possible. Make sure that you have your child's attention before you speak. Acknowledge, encourage, and praise all attempts to speak. Show that you understand the word or phrase by fulfilling the request, if appropriate. Pause after speaking. This gives your child a chance to continue the conversation. Continue to build vocabulary. Introduce a new word and offer its definition, or use it in a context that is easily understood. This may be done in an exaggerated, humorous manner. "I think I will drive the vehicle to the store. I am too tired to walk" (Nguyen, 2020).

Talk about spatial relationships (first, middle, and last; right and left) and opposites (up and down; on and off). Offer a description or clues, and have your child identify what you are describing: "We use it to sweep the floor" (a broom). "It is cold, sweet, and good for dessert. I like strawberry" (ice cream). Work on forming and explaining categories. Identify the thing that does not belong in a group of similar objects: "A shoe does not belong with an apple and an orange because you can't eat it; it is not round; it is not a fruit" (Chesov, 2021).

Help the child follow two- and three-step directions: "Go to your room, and bring me your book". Encourage your child to give directions. Follow his or her directions as he or she explains how to build a tower of blocks. Play games with your child such as "house." Exchange roles in the family, with your pretending to be the child. Talk about the different rooms and furnishings in the house (Nguyen, 2020).

The television also can serve as a valuable tool. Talk about what the child is watching. Have him or her guess what might happen next. Talk

about the characters. Are they happy or sad? Ask your child to tell you what has happened in the story. Act out a scene together, and make up a different ending. Take advantage of daily activities. For example, while in the kitchen, encourage your child to name the utensils needed. Discuss the foods on the menu, their color, texture, and taste (Song et al., 2022).

Where does the food come from? Which foods do you like? Which do you dislike? Who will clean up? Emphasize the use of prepositions by asking him or her to put the napkin on the table, in your lap, or under the spoon. Identify who the napkin belongs to: "It is my napkin." "It is Daddy's." "It is John's". While shopping for groceries, discuss what you will buy, how many you need, and what you will make. Discuss the size (large or small), shape (long, round, square), and weight (heavy or light) of the packages (Sunderajan and Kanhere, 2019).

2.11. Role of parenting skills

Parental do skills had an indirect effect on the relationship between group and child word types, with a stronger parent do skills predicting more child word types in households. The employment of child-directed skills by moms aided in the development and enhancement of child's language. Parent-training treatments that target child behavior problems may also promote language production in children (Mroz et al., 2013).

Children from two-parent households with a father who participated in therapy had fewer parent who reported externalizing behavior problems than children from single-mother families and children from two-parent families with no father. Children from father-involved homes were also much more obedient during a cleanup task after therapy than children from single-mother families (Ismailova et al., 2017).

The development of parent–child interactions is dependent on parental perceptions. Understanding how parents perceive language development, challenges, and intervention would assist speech and language therapists to be more attentive to the needs of the families with which they

work, as well as lessen the chances of parents misinterpreting the goals and procedures of therapy. This, in turn, may have an impact on therapy uptake, attendance, participation, and satisfaction (Catrina and Lier, 2019).

A setting rich in speech expressions stimulate children to talk and demonstrates the use of emphasis, organization, and accent to aid in the development and improvement of language abilities (Song et al., 2022).

2.12. Parents' knowledge and attitudes about speech delay:

Parents are part of the caregivers for children with language disorders and speech delays. Increasing the parents' level of knowledge as well as their positive attitudes towards dealing with this problem increases the chances of children's improvement because the development of communication in the early years of a child's life is closely related to and depends on the input and stimulation received from primary caregivers. While turbulent interactions between the caregiver (parents) and the child may expose him to the risk of developing a communication disorder and then a speech disorder and delay, therefore, parents play an important role in the early recognition of language disorders and help the child's improvement (Mostafa et al., 2018).

Baie et al., 2015 mentioned that there is a high significant relationship between increased knowledge of parents and speech delay among children, as well as they have a role in improving the condition.

The families have a significant impact on a child's life and assist their cognitive, social, and linguistic development. Family involvement is essential in the prevention, treatment, and maintenance stages of the learned abilities in the health discipline of speech and language therapy, which studies human communication and problems. Since families make up the bulk of a child's time, parents and other caregivers play a crucial role in shaping their communication environment and are more likely than speech and language therapists, doctor, nurses to interact with children in natural settings (Uysal & Tura, 2019).

Therefore, early detection of speech and language impairments by parents is crucial for the early managements, which have a significant influence on language of child's skills, social, and mental development growth. In addition, afterward a child's unique needs are identified and therapy is begun, parents can help the child generalize the skills they learn in therapy to their homes and other social settings (Tempel et al., 2009).

Child speech and language as other child skills has normal developmental milestones, the age at which child learn speech and start talking can vary. Knowing a bit about speech and language development can help parents figure out if there's cause for concern about child status (Elmasry et al., 2020).

Child Parents and family are an important part of helping child who have a speech or problem. It is not uncommon for parents and family members to become concerned when their child doesn't seem to be developing according to the normal schedule of child milestones. Early intervention is one comprehensive service to provide focused stimulation for the child with speech developmental delays. For this part it's very important to improve parent's knowledge and attitude about speech delay and by which way can helping in speech therapy. The focus of early intervention is to help the children learn skills focusing on the developmental domains that typically develop during the first three years of life such as: Physical (reaching, rolling, crawling, and walking), cognitive (thinking, learning, solving problems), communication (talking, listening, understanding), social/emotional (playing, feeling secure and happy) and self-help (eating, dressing) (Catrina and Lier, 2019).

If the child has delay in one or more of these developmental areas, the child receives children Speech and language therapy service to meet his/her individual needs (Elmasry et al., 2020).

2.13. Previous studies:

First study:

A study was conducted by (Zabin, et al., 2021) The title of the study was "Delayed Speech among Children from Two to Five Years Old in Ramadi City, West of Iraq" mentioned that the 348 children with speech disorders and speech delay. The study referred to 27.9% diagnosed with familial speech delay, 25.6% intellectual disability, 9% autism, 35% isolated expressive language disorder and 2.5% hearing impairment respectively. Also the study mentioned that 69.8% of delayed speech children were boys and 30.2% were girls. And total of 59.2% of cases were from age 2-3 years, 34.8% from 3-4 and only 6% from 4-5 years. also reported that 37% of cases had a positive family history. also the study reported that watching TV or a mobile device for >2 h as a risk factors for speech delay and low economic state was not. Most of the mothers were from intermediate and secondary school education.

Second study:

Underajan, and Kanhere (2019), conducted a study in their study under title “Speech and language delay in children: Prevalence and risk factors” mentioned that from 84 children (42 children with speech delay and 42 controls) in age group 1-12 years, history of the child’s morbidity pattern as risk factors for speech delay were recorded. Also the risk factors found to be significant were seizure disorder, multilingual family environment, low maternal education, consanguinity and inadequate stimulation were 2.53% at ($P<0.001$) respectively, also said that the other risk factors significant with speech delay as asphyxia at birth at ($P=0.019$), oropharyngeal deformity at ($P=0.012$), family history at ($P=0.013$), low paternal education at ($P=0.008$).

Third study:

A study conducted by (Mostafa et al., 2018) under title “Public awareness of delayed language development in Upper Egypt” that 1500

children with good knowledge of speech delay development represented 74.49% of the study group, the age were 2 years that mean thought to be the most suitable age to seek medical advice for children with speech delay development in 48.84% of the study group, some occupations such as teachers did not value early intervention of language delay. Language therapy was thought to be the best way to treat speech delay in 68.7% of the study group. Also this study funded that limited knowledge of the value of early language learning and the best treatment of speech delay.

Fourth study:

Baie et al., (2015) done a study under title "Prevalence of Speech Disorders among Elementary School Children in Al-Hilla City at Iraq" the study sample were 532 male and female were 529, prevalence of school children with speech sound disorders were 11.4%, while the prevalence of stuttering were 1.2%. The prevalence of speech disorder was significantly higher among male children as compared to female, also the study mentioned that the male to female ratio was1.8:1. And funded that a significant relationship between the level of education of parents and speech disorder. Also There was a significant correlation between stuttering and school performances of students were low. This study concluded that the speech disorders are highly prevalent in first class primary schools in our community compared to other developed countries.

Chapter Three

Methodology

Chapter Three

Methodology

This chapter discusses the methodological techniques used in this study, objectives of study and aims chieving, as well as others contains like administrative arrangement, data collection methods, criteria of the sample, study setting, sample selection, instrument construction, and data analysis.

3.1. Design of the Study:

A quantitative research approach was followed on parents of children with speech delay and attending Hearing and Speech Center in Imam Al-Hassan Hospital to investigate the knowledge and attitudes of their parents toward speech delay among children under 5 years with the application of the descriptive cross sectional, in order for a achieving the early specified objectives. Survey questionnaire was obtained to collect information from parents by using an adapted questionnaire. This survey (descriptive) was selected for provides an exact depiction or description of the study characteristics (knowledge and attitudes). The study began from October 1st, 2021, to July 17th, 2022.

3.2. The Administrative Arrangements:

Preceding for collection of study data, the official administrative agreement was gotten for study conduct from:

1. The researcher obtained sampling permission from the University of kerbala/ Nursing College/ pediatric nursing department (Appendix A).
2. The researcher obtained a job facilitating from the Ministry of Health\ Kerbala Health Director/ Imam Al-Hassan Hospital (Appendix B).
3. Finally sampling permission from parents' of children with speech delay attend the Hearing and Speech Center in Imam Al-Hassan Hospital.

3.3. The setting of the Study:

This study was conducted of the Hearing and Speech Center in Imam Hassan Hospital at Holy Kerbala City. To investigate the parents' knowledge and attitudes toward speech delay among children under 5 years of old.

3.4. Sample of the Study:

A non-probability (convenience) sample of 100 parents toward speech delay among children under 5 years of old were chosen randomly from Hearing and Speech Center in Imam Al-Hassan Hospital.

Table (2 shows the study sample that selected based on criteria of the study, after selecting the sample, the researcher obtained consent from parents.

Table (3-1) Distribution of the study sample:

No.	Hospital	Number of the sample
1.	Imam Al-Hassan hospital (pilot samples)	**10**
2.	Imam Al-Hassan hospital (Study samples)	**100**
	Total	**110**

Table (3-2) Distribution gender of study sample.

No.	children Parents'	No. of children included within criteria	
		Male	**Female**
1.	**Imam Al-Hassan Medical Hospital**	**55**	**45**
Total		**100**	

3.5. Inclusion Criteria:

The sample was selected according to the following criteria.

- ❖ Parent's children who agree to participate in present study
- ❖ Children's without any medical or intellectual disabilities.
- ❖ Parents if have children under five years of age with speech delay.

3.6. Exclusion Criteria:

- ❖ Parents of children who refuse to participate in present study.

3.7. Research sampling method:

Convenience sampling will be used. As a result, all parents of children with speech delay who attend the Hearing and Speech Center in Imam Al-Hassan hospital who meet the study's inclusion criteria will be invited to voluntarily participate.

3.8. Phases of the study:

The investigation of knowledge and attitudes of parents toward speech delay among children under 5-years in Hearing and Speech Center at Holy Kerbala City, to survey data collection method in Imam Al-Hassan hospital in order to assess the number of children with speech delay who attend the Hearing and Speech Center to determine the number of population sample that can be included.

3.9. The study instrument:

Descriptive study to assess knowledge and attitudes of parents toward speech delay among children under 5 years of old, questionnaire format was constructed by researcher from relevant studies and literature.

A self-directed questionnaire was built by researcher for the purpose of collection the data concerning the knowledge and attitudes of parents toward speech delay among children under 5 years at the Hearing and Speech Center. It was consisted of four majors parts (Appendix C) which includes:

3.9.1. Part I: Demographic characteristics:

A self-administered questionnaire for assessing demographic information sheet for parents of children with speech delay and related factors included (who answer the questionnaire, age, level of education, occupation, how many children in family, child age, gender of child, the of sequence of a child in family, have any brother or sister with speech delay).

3.9.2. Part II: Parent's knowledge toward speech delay among children under 5 years of old:

The evaluation of Knowledge by using a self-administered questionnaire that consist of three parts:

a. General knowledge of parents about speech delay:

This part contains (6) questions concerned with general information of parents toward speech delay among children.

b. Knowledge of Parents about signs & symptoms of speech delay among children:

This part contains (8) questions concerned with parent's knowledge about the symptoms and signs of speech delay among children.

c. Parents' knowledge about the causes of speech delay among children:

This part contains (5) questions concerned with parents' knowledge about the causes of speech delay among children under 5 years of old.

d. Parents' knowledge of the effects of speech delay:

This part contains (4) questions concerned with parents' knowledge about the effects of speech delay among children (Appendix D and F).

3.9.3. Part III: Parents' attitudes, toward speech delay among children under 5-years:

The evaluation of attitudes by using self-administered questionnaire that consists (18) questions concerned with attitudes of parents toward speech delay among children under 5 years of old.

3.10. Pilot study

A pilot study was carried out on April 2nd, 2022, to April 7th, 2022 include (10) parents of children with speech delay who attended the Hearing and Speech Center in Imam Al-Hassan Hospital and this sample was excluded from the original sample.

The pilot study was carried out for the following purposes:

1. Identifying the barriers that may be encountered during the data collection process.
2. Estimating the time required for the data collection for each participant.
3. Obtaining the clarity and the content adequacy of the questionnaire and observation.
4. Determining the reliability of the questionnaire.
5. The pilot by showed that the time of interview with parents of children takes from (15-25) minutes, the items of questionnaire were clear and understood by parents.

3.11. Validity

Content validity was determined for the questionnaire through the use of panel of (14) experts for different area with not less than five years' experience in the field practice include: (5) members from University of Kerbala\ Collage of Nursing, (5) members from University of Kufa\ Collage of Nursing, (3) members from University of Baghdad\ Collage of Nursing, (1) member pediatric specialist from Imam AL-Hussein Medical City. Their responses indicate that all of them agreed upon the questionnaire content clarity, relevancy and adequacy. And some addition and omission.

3.12. Reliability:

Reliability (internal constancy) was determined through the correlation coefficient "Alpha Cronbach" technique for parent's knowledge and attitudes related to speech delay. This study used the Cronbach alpha coefficient test to analyze the internal consistency reliability. The reliability score was (r=0.84) for the Knowledge and the reliability score was (r=0.78) for the Attitudes questionnaire. Nieswiadomy (2012) reported that reliability coefficients of ≥ 0.70 are considered acceptable, and it is not suggested to use an instrument with reliability of < 0.70.

Table (3-3) Correlational Coefficient "Cronbach Alpha" Test for the Investigating the Knowledge and Attitudes of Parents' toward Speech Delay among Children under 5-Years questionnaire:

Scale name	Reliability technique	Actual values	Acceptable value	Assessment
Knowledge of Parents' toward Speech Delay among Children Under 5-Years	**Alpha (Cronbach)**	**0.84**	**0.70**	**pass**
Attitude of Parents' toward Speech Delay among Children Under 5-Years	**Alpha (Cronbach)**	**0.78**	**0.70**	**pass**

3. 13. Rating, Scoring, and Reliability:

3. 13.1. Scoring and Rating of the questionnaire:

All study items ought to be scored & rated according to the following procedures:

A. Rating and scoring of questionnaire part I (Demographic Characteristics):

For rating and scoring demographic information sheet and related factors included (who answer the questionnaire, age, level of education, occupation, how many children in family, child age, gender of child, the of sequence of a child in family, have any brother or sister with speech delay). All these items were rated and scored as choosing a suitable answer for every question.

B. Rating and scoring of questionnaire part II (parent's knowledge questionnaire):

For rating and scoring parent's knowledge questionnaire sheet and related factors included four parts, each part consists of several questions. And each of these questions is scored on a 3-point (Not Sure, Don't Know and Know) ranging from (1 to 3), the rating is as follows:

(1) Score applied to (Don't Know) answer.

(2) Score applied to (Not Sure) answer.

(3) Score applied to (Know) answer.

C. Rating and Scoring of questionnaire part III (parent's Attitudes questionnaire) (Appendix C & D):

For rating and scoring parent's attitudes questionnaire sheet and related factors that consist of several questions. Each of these questions is scored on a 5-point (Agree, Strongly Agree, Neutral, Disagree, And Strongly Disagree) ranging from (1 to 5), the rating is as follows:

(1) Score applied to (Strongly Disagree) answer.

(2) Score applied to (Disagree) answer.

(3) Score applied to (Neutral) answer.

(4) Score applied to (Agree) answer.

(5) Score applied to (Strongly Agree) answer.

3.14. Implementation of the study:

After official permission that was obtained from University of Kerbala/ College of Nursing and Ministry of Health / at Imam Al-Hassan Hospital, the researcher begins to collect the study sample (parents) who meet the criteria of the study. All the participants were informed to ensure their agreement to participate in the study. Before implemented of the study all samples was exposed to questionnaire and give all information about the study and the purpose of this research.

Study's questionnaire consists of three major parts (Appendices C & D). The study was implemented at Imam Al-Hassan hospital / the Hearing and Speech Center, in the periods from May 22 to June 21, 2022 by visit the child on deferent time at morning in the Hearing and Speech Center, every parents of children as alone were produced with respect to the essential knowledge and attitudes relative to the speech delay. Demographic questionnaire, knowledge questionnaire and attitudes questionnaire were obtained from parents of children.

3.15. Data Collection:

The data were collected from (100) parents of children who attend the Hearing and Speech Center in Imam Al-Hassan hospital at the Holy Kerbala City. The sample were selected subsequently obtaining the sample consent centered on criteria of the study. The data were collected for the study sample from May 28th, 2022, to July 29th, 2022.

1- All participants were interviewed and informed about the study purposes and objectives.

2- All participants were exposed to demographic, knowledge and attitudes questionnaire were obtained from child parents. in order to detect the knowledge and attitudes of parents toward speech delay among children under 5 years.

3.16. Determinate the knowledge and attitudes of parents toward speech delay among children under 5 years:

After implementation of the study, and in order to detect the knowledge and Attitudes of Parents toward Speech Delay, the researcher calculated the score percentages of s knowledge and attitudes response for each child parents in the Hearing and Speech Center at Imam Al-Hassan Hospital related period of the study, and then calculated the relationship among the different variable for each study sample of study groups to achieve the study objective for all samples.

3.17. Statistical data analysis:

Data of the study were analyzed done by using the Statistical Package Program of Social Sciences SPSS (Version) 22 following approaches of statistical analysis of study data were used in direction to analyze and assess the finding of the study:

3.17.1. Descriptive statistical analysis:

Include the percentages (%), and F: frequencies. The percentages (%) value was calculated according to the following formula:

% = (Frequencies /Sample size) × 100.

3.17.2. Inferential statistical analysis:

A. Chi-Square was the statistical approach that was used to evaluate the relationships between the independent variables and the impact of the interventional procedure. Chi-Square is a statistical method that was employed.

B. Significance levels a probability value of ≤0.05 was considered statistically significant (Abd El Aziz et al., 2016). The accepted probabilityvalue for significance was < 0.05% to > 0.01%, indicating statistically significant, and < 0.01% indicating highly significant statistical results (Al-Kerety 2017). Nieswiadomy (2012), define the significance level as the probability value of rejecting a null hypothesis

when it is true.

C. Cronbach's alpha coefficient test, is a test to measure the internal consistency reliability. The reliability is an alternative way of looking at the extent to which items go together, similar to the factor analysis itself. Also, reliability computations are useful for further identifying weak items that may be omitted in subsequent analysis (Munro, 2005).

D. Descriptive Statistical Data analysis contain: M.S=mean of the score, SD=standard deviation, and R.S=Relative sufficiency (Crawley, 2007).

E. Cutoff point for reclassification of the responding according to the two dichotomous random variable (failure and pass) which were transformed in compact from the difference of the studied question's items of questionnaire demographic, knowledge and attitudes questionnaire for all study samples.

F. Two extreme values (minimum and maximum) of actual responding.

H. Graphical presentation by using:

- ❖ Bar - chart.
- ❖ Pie – charts (Appendix A).

3.14: Limitations of the study:

Many limitations that appeared to the researcher after the research details begging, including:

1. The lack of resources and research, which is almost non-existent, on the subject of delayed speech in children. There is only one study in the Arab world that was conducted in Kuwait and very few globally.
2. The difficulty of identifying children who suffer from delayed speech alone, even by doctors and specialists, as this problem is common with many diseases, including autism, atrophy and lack of brain activity, and others.
3. The inability to communicate with children, as they naturally suffer from speech difficulties and are unable to express their problems and answers.

4. lack of Parents' awareness about the problem of their children, and they often leave this problem without referring to specialists or visiting speech centers.
5. Many parents consider mentioning the problem of delayed pronunciation in their children as a deficiency and defect that reduces their value and the value of their children. So, many of them refuse to talk or tend to remain silent about this issue

Chapter Four

Results & Findings

Chapter Four

Results and Findings

This chapter presents the results of the analysis of the data that are in correspondence with the objectives of the study that are early presented in chapter one. The results analyzed through the application of statistical procedures that manipulated and interpreted. Those results organized as the following:

Table (4-1): Distribution of the Parents Demographic Characteristics of Children with Speech Delay.

Demographic Characteristics of parents		Freq.	%
1. Who answer the questioner	Father	24	24.0
	Mother	76	**76.0**
	Total	100	100.0
2. Age group	25 Years And Less	8	8.0
	26-35 Years	33	**33.0**
	36-45 Years	30	30.0
	46-55 Years	24	24.0
	56 Years And More	5	5.0
	Total	100	100.0
3. Education level	Don't read and writ	10	10.0
	Read and writ	24	24.0
	Secondary	35	**35.0**
	Diploma	24	24.0
	Bachelor and above	7	**7.0**
	Total	100	100.0
4. Employee	Hose wife / free work	62	62.0
	Employee	38	38.0
	Total	100	100.0
4. How many children in family	One child	12	12.0
	Tow child	51	**51.0**
	Three child	5	5.0
	Four child and more	32	32.0
	Total	100	100.0
5. Child age	1to 2 Year	17	17.0
	3 to 4 Year	67	**67.0**
	4 to 5 Year	16	16.0
	Total	100	100.0

6. Gender of child	Male	55	**55.0**
	Female	45	45.0
	Total	100	100.0
7. Sequence of child in family	The One	20	20.0
	The Second	36	**36.0**
	The Three	24	24.0
	The Four	20	20.0
	Total	100	100.0
8. Have any brother or sister with speech delay	Yes	19	19.0
	No	81	**81.0**
	Total	100	100.0

Freq. = Frequency, % = Percent,

Table (4-1) represented that the distribution of parents' demographic characteristics of children under 5 years of old with speech delay who attend the Hearing and Speech Center in the Holy Kerbala City. The results in this table indicated that the majority of the parents that participated in the study and answer the questionnaire were mothers represented 76%, according to the age of the parents the majority of them were in the age group (26-35) years represented 41%. While the educational level of the parents who graduated bachelor and above and secondary school were 38 %, 31% respectively. Regarding the employee of parents, the results of the study showed the majority of them were hose wife/free work with represented 62%. Also, regarding the number of children the family, the results of the study show that 51% have two children. With regard to the age of children, the results showed that the proportion of children at the age of (3-4) years represented 67%.The results of the study also showed that 55% of the children were male. Regarding the sequence of the children in the family, the study showed that 36% of the participants were from the second child the category in the family. Finally, regarding the family history if have any brother or sister with speech delay the study results show that majority of the children don't have a family history with speech delay and represented (81%).

Table (4-2): Knowledge of Parents' toward Speech Delay among Children Under 5-Years :

Item	Not Sure		Don't Know		Know		Assess	
	Freq.	%	Freq.	%	Freq.	%	Mean of score	level
(A) General knowledge for parents about speech delay								
1-Speech delay: is a delay in the development in use the mechanisms that yield sound and speech	27	27.0	**42**	**42.0**	31	31.0	1.5	**L**
2-Speech delays result from difficulties in understanding language	**35**	**35.0**	8	8.0	57	57.0	2.35	**H**
3-Speech delay differs from language delay in that language delay: is delay in the development in using of vocabulary & linguistic knowledge.	16	16.0	42	42.0	42	42.0	1.4	**L**
4-There may be a delay in the speech in the child, but it is not necessarily associated with a delay in the language.	37	37.0	26	26.0	37	37.0	2.00	**M**
5- A 15% of children at the age of two years have a speech delay.	42	42.0	12	12.0	46	46.0	1.60	**L**
6- A 70% of children under the age of two who suffers from a delay in speech can overcome these problems by the age of four years.	33	33.0	25	25.0	42	42.0	1.65	**L**
(B) Parents' knowledge about the symptoms and signs of speech delay in children								
1-Speech delay is difficulty understanding speech.	**53**	**53.0**	4	4.0	43	43.0	1.3	**L**
2-Delayed pronunciation is a lack of vocabulary	**37**	**37.0**	28	28.0	35	35.0	1.98	**M**
3-Delayed pronunciation is difficulty using the correct words when arranging terms to form a sentence or phrase	26	26.0	19	19.0	**55**	**55.0**	2.29	**M**
4-A child with delayed speech has a delay in mental development (creativity and thinking)	**59**	**59.0**	37	37.0	4	4.0	1.45	**L**
5-A child with delayed speech has a delay in motor development (play).	**59**	**59.0**	29	29.0	12	12.0	1.53	**L**
6-The early signs of speech delay start from the age of 12 months, when he is able to do any of the following: 6-1: Using gestures such as: waving his hand to say goodbye	41	41.0	6	6.0	**53**	**53.0**	2.12	**M**
6-2: Referring to things.	21	21.0	**73**	**73.0**	6	6.0	1.0	**L**
6-3: Use several different consonant sounds.	6	6.0	42	42.0	**52**	**52.0**	2.11	**M**

6-4: loudness,	36	36.0	6	6.0	**58**	**58.0**	2.22	**M**
6-5: Communicate for needs	32	32.0	4	4.0	**64**	**64.0**	2.51	**H**
7- Signs that appear on children between the ages of 15 and 18 months, as they show the following: "He doesn't say "mama" and "dada". 7-1: Doesn't respond when told no, hello, & goodbye."	**46**	**46.0**	13	13.0	41	41.0	1.95	**M**
7-2: Does not say 15 words by age 18 months.	34	34.0	31	31.0	**35**	**35.0**	1.23	**L**
7-3: Unable to recognize the names of the body parts.	**46**	**46.0**	20	20.0	22	22.0	1.14	**L**
7-4: Finds it difficult to imitate sounds.	**55**	**55.0**	10	10.0	35	35.0	1.25	**L**
7-5: Preferred for gestures over verbal expression.	40	40.0	6	6.0	**54**	**54.0**	2.40	**H**
8-Signs of delayed speech in children from 2 to 4 years of age include: 8-1: Suffers from inability to produce words & phrases spontaneously.	24	24.0	12	12.0	**64**	**64.0**	2.41	**H**
8-2: Suffers from the inability to follow simple instructions and commands.	29	29.0	27	27.0	**44**	**44.0**	2.00	**M**
8-3: Cannot connect two words.	12	12.0	**77**	**77.0**	11	11.0	1.21	**L**
8-4: lacks consonant sounds at the beginning or end of words.	35	35.0	**40**	**40.0**	25	25.0	1.33	**L**
8-5: He suffers from a lack of understanding of the child by family members.	18	18.0	39	39.0	**43**	**43.0**	1.87	**M**
8-6: He suffers from the inability to form simple sentences of 2-3 words.	31	31.0	**65**	**65.0**	4	4.0	1.22	**L**
(C) Parents' knowledge of the causes of delayed speech in children								
1-Speech delay is caused by disturbances in the muscles needed to speak	30	30.0	45	45.0	25	25.0	1.33	**L**
2-Delayed speech for a child with hearing problems	**53**	**53.0**	5	5.0	42	42.0	1.88	**M**
3-Delayed speech occurs as a result of a child suffering from mental disorders such as autism	16	16.0	**64**	**64.0**	20	20.0	1.15	**L**
4-Speech delays occur as a result of neurological disorders such as cerebral palsy	10	10.0	**84**	**84.0**	6	6.0	1.11	**L**
5-Speech delays run in the family	**44**	**44.0**	21	21.0	35	35.0	1.32	**L**
(D) Parents' knowledge about the effects of delayed speech								

1-Children with speech delays find it difficult to communicate with their peers, which leads to psychological problems	24	24.0	38	38.0	38	38.0	1.33	**L**
2-Children with speech delays have a lower level of learning skills	**37**	**37.0**	30	30.0	33	33.0	1.23	**L**
3-Children with speech delays are more likely to suffer from behavioral problems	**42**	**42.0**	17	17.0	41	41.0	1.44	**L**
4-Children with speech delays have a lower reading level than their peers	**36**	**36.0**	32	32.0	32	32.0	1.51	**L**

%= percent F= Frequency, Assess: assessment, M.S = mean of score, L = low (Mean of scores 1- 1.66), M = moderate (Mean of scores 1.67 - 2.33), H = high (Mean of scores 2.34 – 3)

Table (4-2) showed the respondents' knowledge of a question about parent's general information about speech delay among children under five years of old. The results of present study showed that the parent's knowledge about the symptoms and signs of speech delay in children were mostly moderate, while the parent's knowledge of the causes of delayed speech among children under five years mostly low, and parents' knowledge about the effects of delayed speech on children were low.

Table (4-3): Total Knowledge of Parents' toward Speech Delay among Children Under 5-Years :

Level of knowledge / Information	Low level		Moderate level		High level	
	Freq.	%	Freq.	%	Freq.	%
(A) General knowledge for parents about speech delay	66	66.0	17	17.0	17	17.0
(B)Parents' knowledge about the symptoms and signs of speech delay in children	47	47.0	38	38.0	15	15.0
(C) Parents' knowledge of the causes of delayed speech in children	80	80.0	20	20.0	0	0.0
(D) Parents' knowledge about the effects of delayed speech	100	100.0	0	0.0	0	0.0

%= percent F= Frequency,

This table shows the low level of parental knowledge of parents' toward speech delay among children under 5 years. A 66% of parents had low level of knowledge about general knowledge for parents about speech delay and 47% of them had low level of knowledge about the symptoms and signs of speech delay in children. Parents' knowledge about the causes of delayed speech in children had low in percent of 80%, also about the effects of delayed speech were 100%.

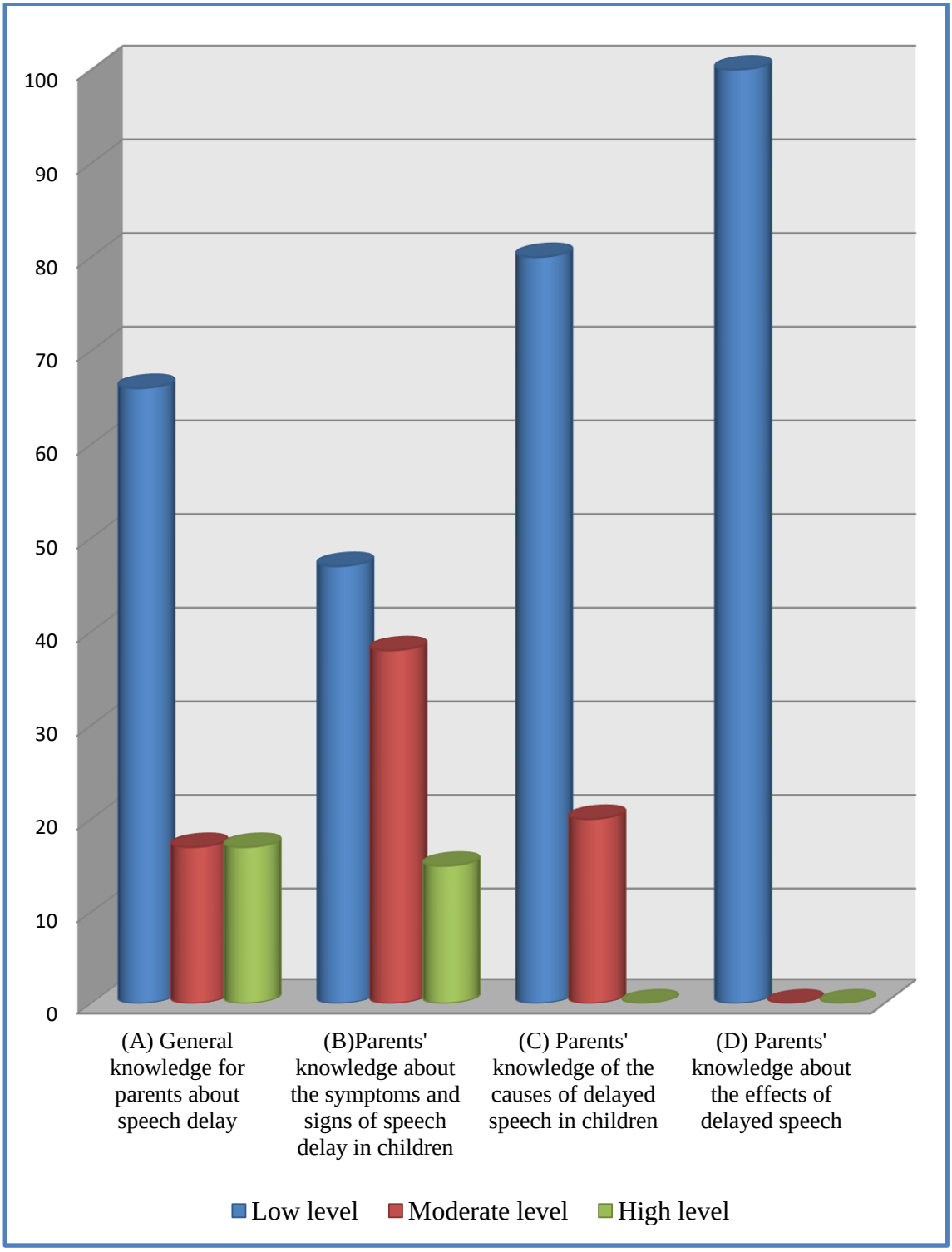

Figure (4-1): Total knowledge of parents' toward speech delay among children under 5-years.

Table (4-4): The attitude of Parents toward Speech Delay among Children Under 5 Years :

Item	Strongly Disagree		Disagree		Natural		Agree		Strongly Agree		Assess	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	mean of score	level
1. A child's learning to pronounce requires training more than twice a day	31	31.0	10	10.0	24	24.0	30	30.0	5	5.0	2.0	Negative
2. Focus training on syllables, words, and repetitive phrases	22	22.0	48	48.0	5	5.0	20	20.0	5	5.0	1.4	Negative
3. Making the child ask for what he wants, even in simple words, before giving him things (such as (uncle, daddy, oh, what, hey, bye ... etc.)	20	20.0	20	20.0	21	21.0	29	29.0	10	10.0	2.4	Negative
4. Encourage the child when he exercises his speaking skills.	11	11.0	39	39.0	15	15.0	20	20.0	15	15.0	2.5	Negative
5. Spending enough time with the child increases pronunciation skills.	22	22.0	18	18.0	5	5.0	20	20.0	35	35.0	3.8	Positive
6. Talking to the child directly improves his pronunciation skills.	20	20.0	20	20.0	21	21.0	29	29.0	10	10.0	2.4	Negative
7. Using gestures when talking to a child improves pronunciation skills.	14	14.0	26	26.0	11	11.0	9	9.0	40	40.0	4.0	Positive
8. Using pointing to objects when talking to a child develops articulation skills.	24	24.0	22	22.0	14	14.0	32	32.0	8	8.0	2.5	Negative
9. Giving the child full attention when talking to him enhances his speech skills.	36	36.0	24	24.0	22	22.0	8	8.0	10	10.0	2.1	Negative
10. Allow the child to interact with other children. Improves pronunciation skills	33	33.0	27	27.0	33	33.0	4	4.0	3	3.0	1.7	Negative
11. Using nonverbal methods of communicating with the child (such as	23	23.0	44	44.0	13	13.0	5	5.0	15	15.0	2.2	Negative

eye contact, flashcards, moving pictures) enhances speaking skills.												
12. Speech delay occurs as a result of delayed growth in the child.	**5**	**5.0**	**15**	**15.0**	**35**	**35.0**	**10**	**10.0**	**35**	**35.0**	**4.5**	**Positive**
13. Family problems between parents may lead to delayed speech.	**31**	**31.0**	**10**	**10.0**	**24**	**24.0**	**30**	**30.0**	**5**	**5.0**	**2.0**	**Negative**
14. Immediate response to the child without letting him talk or ask for what he wants may lead to a delay in pronunciation.	**22**	**22.0**	**48**	**48.0**	**5**	**5.0**	**20**	**20.0**	**5**	**5.0**	**1.4**	**Negative**
15. Not having an older brother for the child to talk to may lead to speech delays.	**20**	**20.0**	**20**	**20.0**	**21**	**21.0**	**29**	**29.0**	**10**	**10.0**	**2.4**	**Negative**
16. Parents not constantly talking to the child and being preoccupied with him leads to a delay in pronunciation.	**36**	**36.0**	**24**	**24.0**	**22**	**22.0**	**8**	**8.0**	**10**	**10.0**	**2.1**	**Negative**
17. Delayed pronunciation occurs in males more than females.	**33**	**33.0**	**27**	**27.0**	**33**	**33.0**	**4**	**4.0**	**3**	**3.0**	**1.7**	**Negative**
18. The child's failure to focus on the parents' lips while repeating the words reduces his pronunciation skills.	**24**	**24.0**	**16**	**16.0**	**5**	**5.0**	**25**	**25.0**	**30**	**30.0**	**3.4**	**Positive**

%= percent F= Frequency, Assess: assessment, M.S = mean of score, Negative = (Mean of scores 1- 2.5), Positive = (Mean of scores 2.6-5).

Table (4-4) indicates that most parents' attitudes toward speech delay among children under 5 years were negative. Most of parent’s answers were strongly disagree and large number of them was disagreeing.

Table (4-5): Total Attitude of Parents' toward Speech Delay among Children Under 5-Years:

Assess / Attitudes	Positive		Negative	
	Freq.	%	Freq.	%
Attitude of Parents' toward Speech Delay among Children Under 5-Years	23	23.0	77	77.0

This table found that 23% of parents had a positive attitude and 77% had a negative attitude toward speech delay among children under 5 years of old.

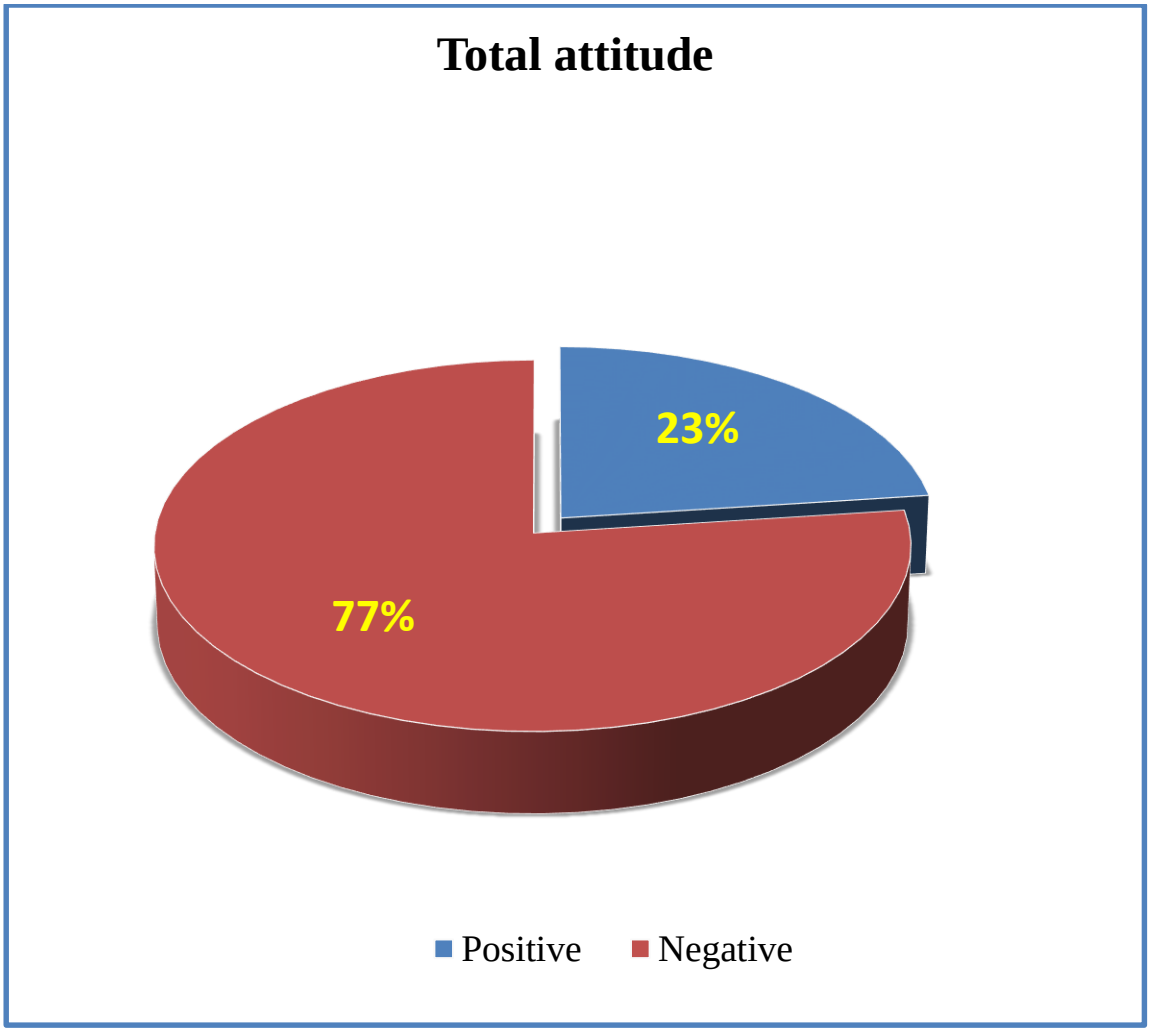

Figure (4-2): Total attitude of parents' toward speech delay among children under 5-years:

Table (4-6): Association between knowledge of parents' toward speech

delay among children under 5-years with their demographic characteristics:

Demographic Characteristics of parents		%	X^2		
			X^2- value	p- value	Sig.
1. Who answer the questioner	Father	24.0	228.44	0.000	S
	Mother	**76.0**			
2. Age group	25 Years And Less	8.0	49.15	0.588	NS
	26-35 Years	**33.0**			
	36-45 Years	30.0			
	46-55 Years	24.0			
	56 Years And More	5.0			
3. Education level	Don't read and writ	10.0	123.95	0.089	NS
	Read and writ	24.0			
	Secondary	**35.0**			
	Diploma	24.0			
	Bacaloreos and above	**7.0**			
4. Employment	Hose wife / free work	62.0	144.95	0.038	S
	Employment	38.0			
5. How many child in family	One child	12.0	122.41	0.069	NS
	Tow child	**51.0**			
	Three child	5.0			
	Four child and more	32.0			
6. Child age	1to 2 Year	17.0	148.52	0.039	S
	3 to 4 Year	**67.0**			
	4 to 5 Year	16.0			
7. Gender of child	Male	**55.0**	53.83	0.404	NS
	Female	45.0			
8. Sequence of child in family	The One	20.0	53.83	0.404	NS
	The Second	**36.0**			
	The Three	24.0			
	The Four	20.0			
9. Have any brother or sister with speech delay	Yes	19.0	148.52	0.039	S
	No	**81.0**			

Sig.: significancy, S: significance (P- value ≤ 0.05), NS: non- significance (P- value > 0.05), χ^2*: chi-square*

Results of chi-square test from this table showed that there

was a significant relationship between parents' knowledge toward speech delay among children under five years of old and person who answer the questioner were mothers represented 76% at p-value = (0.00), the employment status were hose wife represented 62% at p-value = (0.038), the children from the age group (3-4) years represented 67% at p-value = (0.039), and a have any brother or sister with speech delay represented 81% at p-value = (0.039) respectively. Also this table showed there was non-significant relationship between parents' knowledge toward speech delay among children under five years of old with level of education, number of children in family, gender of child and sequence of child in family respectively at p-value < 0.05.

Table (4-7): Association between Attitudes of parents' toward speech delay among children under 5 years with their demographic characteristics:

Demographic Characteristic of parents		%	X^2		
			X^2-value	p- value	Sig.
1. Who answer the questioner	Father	24.0	201.44	0.001	S
	Mother	**76.0**			
2. Age group	25 Years And Less	8.0	55.15	0.988	NS
	26-35 Years	**33.0**			
	36-45 Years	30.0			
	46-55 Years	24.0			
	56 Years And More	5.0			
3. Education level	Don't read and writ	10.0	113.95	0.180	NS
	Read and writ	24.0			
	Secondary	**35.0**			
	Diploma	24.0			
	Bacaloreos and above	**7.0**			
4. Employment	Hose wife / free work	62.0	127.90	0.138	NS
	Employment	38.0			
5. How many child in family	One child	12.0	106.11	0.247	NS
	Tow child	**51.0**			
	Three child	5.0			
	Four child and more	32.0			
6. Child age	1to 2 Year	17.0	166.22	0.022	S
	3 to 4 Year	**67.0**			

	4 to 5 Year	16.0			
7. Gender of child	Male	**55.0**	68.55	0.507	NS
	Female	45.0			
8. Sequence of child in family	The One	20.0	87.83	0.122	NS
	The Second	**36.0**			
	The Three	24.0			
	The Four	20.0			
9. Have any brother or sister with speech delay	Yes	19.0	199.11	0.012	S
	No	**81.0**			

Sig.: significancy, S: significance (P- value ≤ 0.05), NS: non- significance (P- value > 0.05), X^2: chi-square

Results of chi-square test from this table showed that there was a significant relationship between parents' attitudes toward speech delay of children under five years of old and person who answer the questioner were mothers represented 76% at p-value (0.001), children from age group (3-4) years represented 67%, at p-value (0.022). and if had brother and sister suffering from delayed speech represented 81% at p-value (0.012) respectively. Also showed that non-significant relationship between parents' attitudes toward speech delay of children under five years of old and patents age group (26-35) years represented 33% at p-value (0.988), level of education represented 35% at p-value (0.180), employment status were hose wife represented 61% at p-value (0.138), number of children were two children represented 51% at p-value (0.247), gender of child were male represented 55% at p-value (0.507), and sequence of child in family were the second 36% at p-value (0.122) respectively.

Chapter Five

Discussion

Chapter Five

Discussion of The Results

The results of a study on the knowledge and attitudes of parents toward speech delay in children under 5 years old at the Hearing and Speech Center in the Holy Kerbala City are presented in this chapter along with a logically deduced interpretation and discussion. These findings are supported by the literature that is currently available and related to the study topic.

The study was obtained by collect information from parents by using a self-adapted questionnaire to assess and investigate the (knowledge and attitudes of parents toward speech delay in children under 5 years old).

The finds after the implementation of this knowledge and attitudes questionnaire will be discussed under the following subjects.

5.1. Discussion demographical characteristics

The result as shows table (4-1) according to the first item (Who answer the questionnaire) the results indicate that the mainstream of parents that joining to the study and answered the study questionnaire were mothers represented 76%.

This result is similar to the results of Aliza and Umithayyibah, 2020, with a study title of "Father's Role in Parent Training for Children with Developmental Speech Delay" and his finding compared children from single households mothers, and children from two parents' families where the children fathers did not join in speech therapy, while children from families where the fathers joined in management presented lesser levels of parent stated expressing behavior complications.

Also, these results are agree with a study conducted by Aras et al., 2014, in his study title with study title "Parents of children with speech and hearing impairments health-related quality of life" who reported in his research that involved 349 parents were 182 mothers and 167 fathers of pre-school aged children that have a receptive communicative illness of the

language. The findings indicate that moms are more likely than fathers to participate in and visit a language and hearing center with their children.

According to the age of parents, the third of them were in the age group (26-35) years, represented (41%).

This finding its disagreement with a study conducted by Toğram & Bora, 2018, his research title "Attıtudes and Knowledge of Parents and Teachers about Speech Disorders: Nicosia Sample" who stated that the main age group of children parents from (31 to 50 years) represented 74%.

While this finding is variance to findings of a study that conducted by Uysal & Tura, 2019, his research title "The Views and Knowledge of Parents of Children with Speech/Language Disorders on Speech and Language Therapy in Turkey" who stated that the main age group of parents from (36 to 40 years) with ratio of (56%).

The present study finding according to the level of education of the parents show, (38%) of the study sample bachelor and above.

Also present study agree with the study conducted by Toğram and Bora, 2018, who stated that the education level of parents was university and above with a ratio of (56%) of all study participants.

Present study supported by finding of Uysal & Tura, 2019, who stated that the parent's education level of was High school represented 44.3%.

Toğram & Bora, 2018, mentioned that the parent's level of education is university and above with a ratio of 56% of all study participants and these result agree with present study.

This results disagree with the results of Thomas et al., 2003, under the title "Risk Factors for Speech Delay of Unknown Origin in 3 years old Children" that show the parents (specially mothers) with a low level of education

Regarding the work of parents, the present study finding shows the majority of them were hose wife/ free work represented (62%).

This finding agree with finding of Uysal & Tura, 2019, who stated that the majority of parents (mothers) of children are hose wife with ratio 52% of all study participants.

Also, regarding the question of how many children in the family the study results show that 51% of participants have two children with a percentages 51% of study sample.

These finding are similar to the finds of Uysal & Tura, 2019, who stated that the majority of children family have two children.

Likewise concerning the child age, the study results show that 67% of children were with age from three to four years.

These results are disagree with Thomas et al., 2003, that exposed that the most of children with age from 6 to 18 months.

While the results of the gender of children shows that 55% of children were male.

Zabin, et al., 2021, his the study under title of "Delayed Speech among Children from Two to Five Years Old in Ramadi City, West of Iraq" mentioned that the most of study sample are male represented 69.8% and this finding agree with present study.

This result is agree with Thomas et al., 2003, that refers to the most of children are male.

Also these finds agree with Toğram & Bora, 2018, who stated that the most of his study sample of children are male represented 60 % of all study samples.

Regarding the sequence of a child in the family, the study finds shows majority of the study sample with the category of the second child in the family represented 42%.

This result agree with the results of Aliza and Umithayyibah, 2020, who mentioned that most of study sample with the category of the second child in the family represented 52%.

Finally, regarding the family history "if have any brother or sister

with speech delay" the study results show that 81% of children was don't have brother or sister with speech delay.

These results are agree with finding of Campbell et al., 2003, his study title "Risk factors for speech delay of unknown origin in 3-year-old children" who stated that the most of children with speech delay don't have a family history with the same disorder represented 75.1%.

These results disagree with Thomas et al., 2003, his study which mentioned to the majorly of children with positive family history of speech delay.

Also, the result of present study agree with Zabin, et al., 2021, which mentioned that only 37% of study sample have a positive family history with speech delay.

The researcher belief that the most effective tool in children learning is the attending of fathers to the hearing center or participating in training of children in home. And that's because the children respect fathers and learn faster from them.

5.2. Discussion of parents' knowledge of speech delay.

As shown table (4-2) the study reported that the knowledge response toward the first part of the knowledge questionnaire (general knowledge for parents about speech delay) were low knowledge level. About the knowledge response toward the second part of questionnaire (Parent's knowledge about the signs and symptoms of speech delay in children) the results show a low knowledge level over most of the parents. Also this table shows the knowledge response toward the third part of questionnaire (Parents' knowledge of the causes of speech delay in children) the results show a low knowledge level over most the parents. Finally, the knowledge response of the forth part of questionnaire (Parents' knowledge about the effects of speech delay) the results show a low knowledge level in all parents.

The present results are consistent with Uysal and Tura, 2019, that conducted a study under title "The Views and Knowledge of Parents of

Children with Speech/Language Disorders on Speech and Language Therapy in Turkey" which found that parent's knowledge of children with speech and language impairments had limited perspectives and understanding about speech and language treatment. The majority of sample (84.9%) said that the children's parents consumed never reading anything concerned with Speech-Language Pathologists (SLPs). Those who consumed read around SLPs. (16.1 %) said they had found out about them on television, and (12.5%) said they had done so online.

Also present study disagree with study conducted by Mostafa et al., 2018, who mentioned that most of study sample were a good knowledge about speech delay development represented 74.49% of the study group. Also this study funded that limited knowledge of the value of early language learning and the best treatment of speech delay.

The present study agrees with Toğram & Bora, 2018, who stated that the knowledge level of parents was low to moderate level about speech delay.

5.3. Discussion of parent's attitudes toward speech delay among children under 5 years.

As shown table (4-3) the study show that the parent's attitudes toward children with speech delay was negative.

The present result disagree with a study by Andrews et al., 2004, which under title "Parents' Attitudes Toward Family Involvement in Speech-Language Services", which stated that most of the sample study with positive attitudes in order to gather information about the opinions, requirements, attitudes, and traits of parents whose children are receiving speech-language services in the classrooms.

These finds agree with study conducted by Toğram & Bora, 2018, who stated that the attitude level of parents was negative regarding the child with speech delay.

According to the research point view, the delay in the diagnosis

and treatment of children and may also lead to an exacerbation of the situation and the difficulty of children's response to treatment, exercises and programs. The researcher see if the parents do not have knowledge and belief in the child's problem and that this problem needs help and training to get rid of it, they will not be able to accept the idea of involving their children on training clinic for speech problems.

5.4. Discussion of the relationship between parents socio-demographic with parent's knowledge and attitudes.

As shown table (4-3) and (4-4) there is a significant relationship between the knowledge of parents with how answer the questioner, employment, child age, and if have any brother or sister with speech delay and there is a significant relationship between the attitude of parents with how answer the questioner, child age, and if have any brother or sister with speech delay.

These findings agree with a study done by Toğram & Bora, 2018, who stated that there is appositive relationship between the knowledge and attitude of parents and some their demographic characteristic.

This study agree with the results of a study done by Uysal and Tura, 2019, which reported that there are a link between the knowledge of the parents and them attitude with a have any brother or sister with speech delay, employment, and child age.

The present study agree with study conducted by Andrews et al., 2004, that reported that there is a link between the parent's employment, improvement of child with speech delay.

Also this study come along with a study conducted by Tempel et al., 2009, exposed that there is a relationship between the attitude of parents with child age.

The present study disagrees with a study done by Campbell et al., 2003, which exposed that there is non-significant relationship between knowledge of parents and them education level, and age of parents, also

reported that there is a major role for parents' age and cultural level in early detection of speech and language delays in their children and works to help improve their condition and this finding agree with present study.

Chapter Six

Conclusions & Recommendations

Chapter six

Conclusion & Recommendation

6.1. Conclusions:

According to the present study findings, and on the bases of the discussion and interpretation of the findings, the following conclusions have been drawn up:

1. The majority of the parents that participated in the study and answered the questionnaire were mothers.
2. Concerning the children's age the study results show that more than half of the children were with age from three to four years, more than half of them were a male.
3. More than two-third of parents had low level of knowledge about general information of speech delay and half of them had a low level of knowledge about the symptoms and signs of speech delay in children.
4. Majority of the parents had low level of knowledge about of the causes of speech delay in the children, while all of them had low level of knowledge about the effects of delayed speech.
5. More than three-quarters of the parents had negative attitude toward speech delay among children under 5 years.
6. There is a significant relationship between the knowledge of parents with how answer the questionnaire, employment, child age, and a have any brother or sister with speech delay.
7. There is a significant relationship between the attitude of parents with how answer the questioner, child age, and a have any brother or sister with speech delay.

6.2. Recommendations

The study has come up with the following recommendations based on the conclusions:

1. Encouraging parents to attend the sessions and lectures on hearing and speech training of their children and give a clear ideas about the important role those parents play in the treatment and management of speech delay.
2. Focusing on early diagnosis of any speech disorders by parents, teachers and, caregivers, by preparing lectures and posters about speech disorders and how a diagnosis of this problem.
3. Giving special attention to children when dealing with speech disorders.
4. Creating a speech delay education program for parents of young children is essential for improving their understanding of and attitudes toward children's issues.
5. Educating the public at large about speech delays and increasing public awareness of and changing perceptions of speech delays by using social media, mass media and, television.

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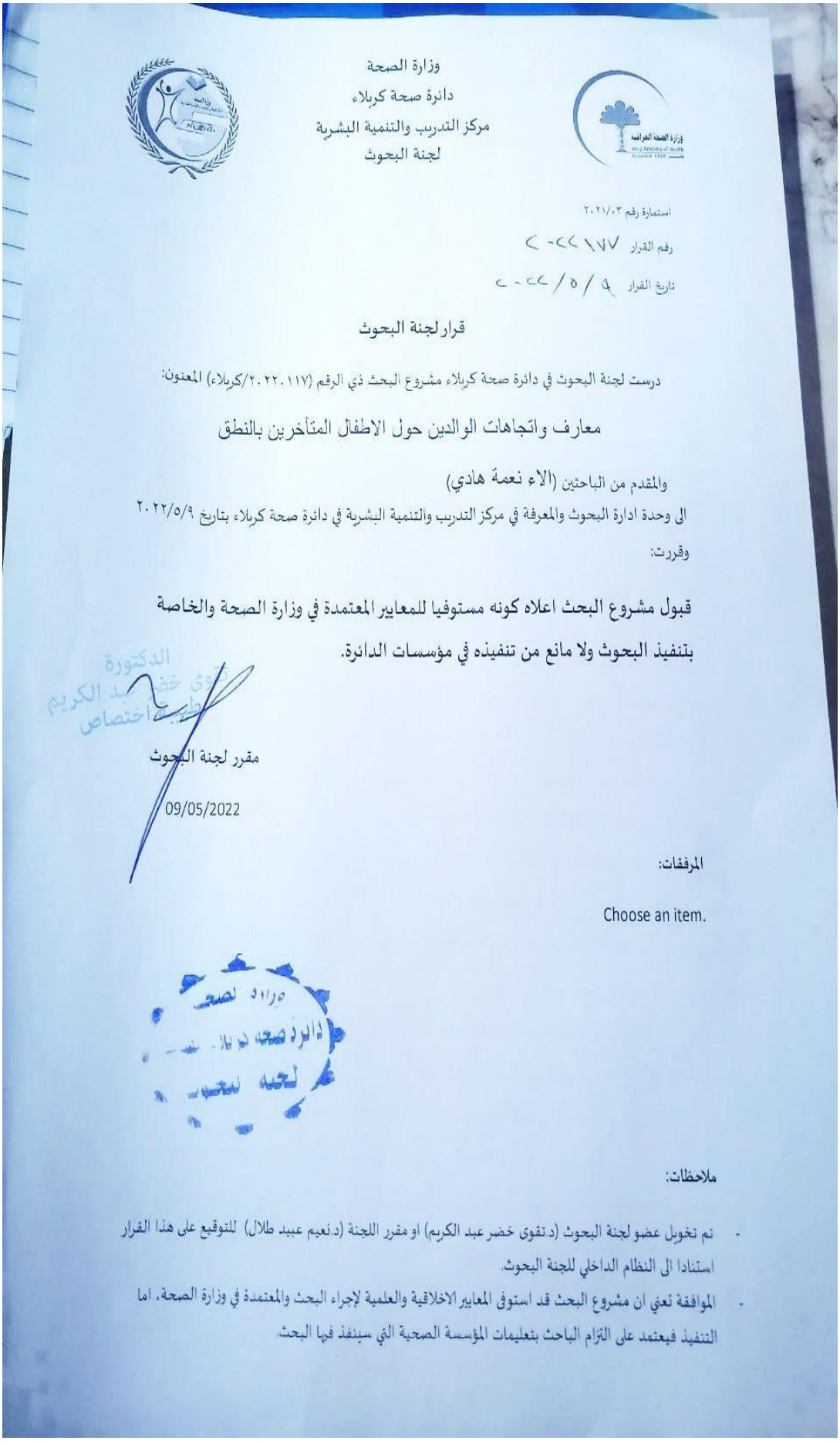
Appendices



وزارة الصحة
دائرة صحة كربلاء
مركز التدريب والتنمية البشرية
لجنة البحوث

استمارة رقم ٢٠٢١/٠٣

رقم القرار ٢٠٢٢-١١٧

تاريخ القرار ٢٠٢٢/٥/٩

قرار لجنة البحوث

درست لجنة البحوث في دائرة صحة كربلاء مشروع البحث ذي الرقم (٢٠٢٢.١١٧/كربلاء) المعنون:

معارف واتجاهات الوالدين حول الاطفال المتأخرين بالنطق

والمقدم من الباحثين (الاء نعمة هادي)

الى وحدة ادارة البحوث والمعرفة في مركز التدريب والتنمية البشرية في دائرة صحة كربلاء بتاريخ ٢٠٢٢/٥/٩

وقررت:

قبول مشروع البحث اعلاه كونه مستوفيا للمعايير المعتمدة في وزارة الصحة والخاصة بتنفيذ البحوث ولا مانع من تنفيذه في مؤسسات الدائرة.

الدكتورة
تقوى خضر عبد الكريم
اختصاص

مقرر لجنة البحوث

09/05/2022

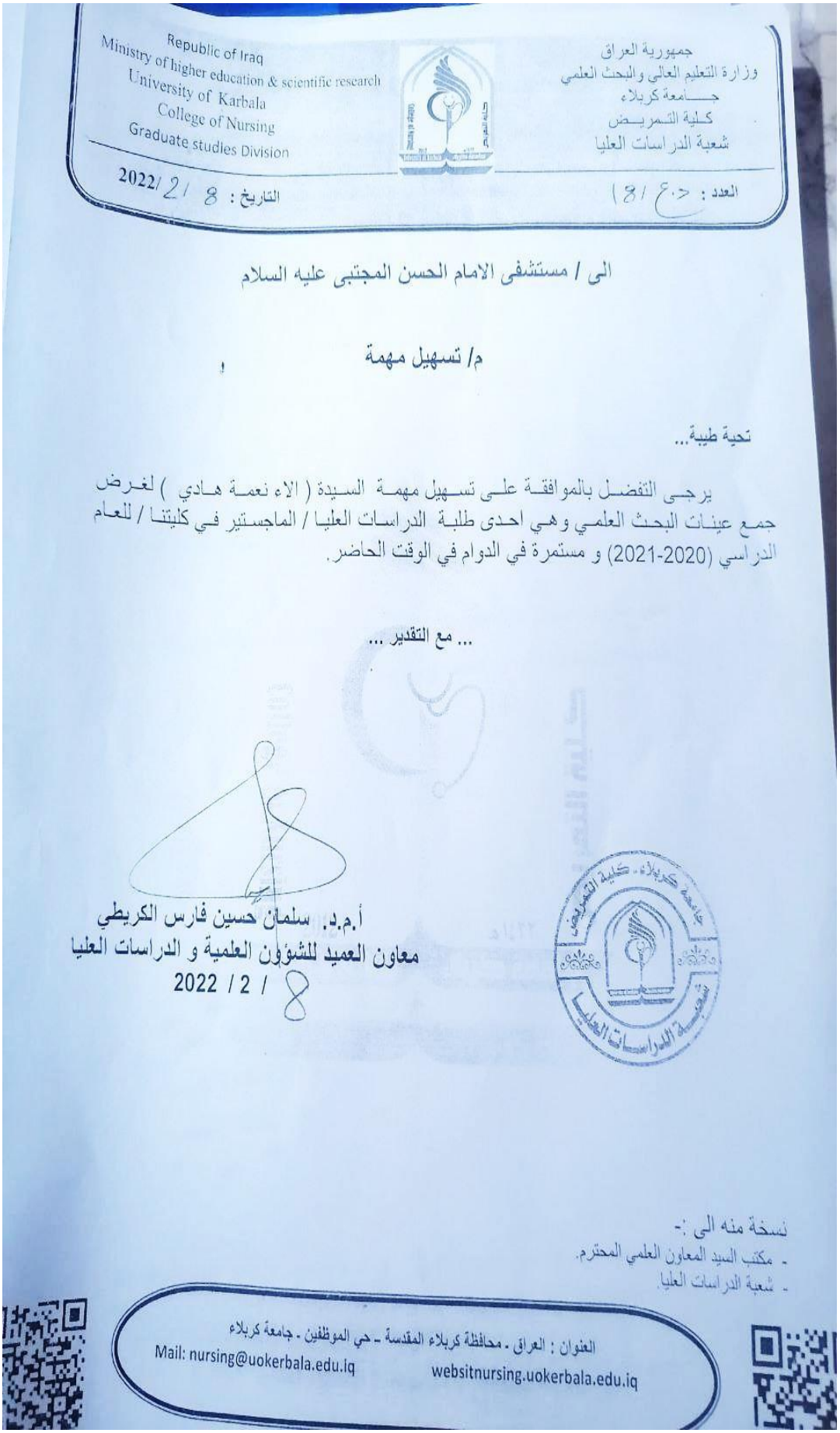
المرفقات:

Choose an item.

وزارة الصحة
دائرة صحة كربلاء
لجنة البحوث

ملاحظات:

- تم تخويل عضو لجنة البحوث (د.تقوى خضر عبد الكريم) او مقرر اللجنة (د.نعيم عبيد طلال) للتوقيع على هذا القرار استنادا الى النظام الداخلي للجنة البحوث.
- الموافقة تعني ان مشروع البحث قد استوفى المعايير الاخلاقية والعلمية لإجراء البحث والمعتمدة في وزارة الصحة، اما التنفيذ فيعتمد على التزام الباحث بتعليمات المؤسسة الصحية التي سينفذ فيها البحث.



Republic of Iraq
Ministry of higher education & scientific research
University of Karbala
College of Nursing
Graduate studies Division

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جـــامعة كربلاء
كلية التمريـــض
شعبة الدراسات العليا

التاريخ : 8 / 2 / 2022

العدد : ح ع / 181

الى / مستشفى الامام الحسن المجتبى عليه السلام

م/ تسهيل مهمة

تحية طيبة...

يرجى التفضل بالموافقة على تسهيل مهمة السيدة (الاء نعمة هادي) لغرض جمع عينات البحث العلمي وهي احدى طلبة الدراسات العليا / الماجستير في كليتنا / للعام الدراسي (2020-2021) و مستمرة في الدوام في الوقت الحاضر.

... مع التقدير ...

أ.م.د. سلمان حسين فارس الكريطي
معاون العميد للشؤون العلمية و الدراسات العليا
2022 / 2 / 8

جامعة كربلاء - كلية التمريض - شعبة الدراسات العليا

نسخة منه الى :-
- مكتب السيد المعاون العلمي المحترم.
- شعبة الدراسات العليا.

العنوان : العراق - محافظة كربلاء المقدسة - حي الموظفين - جامعة كربلاء
Mail: nursing@uokerbala.edu.iq
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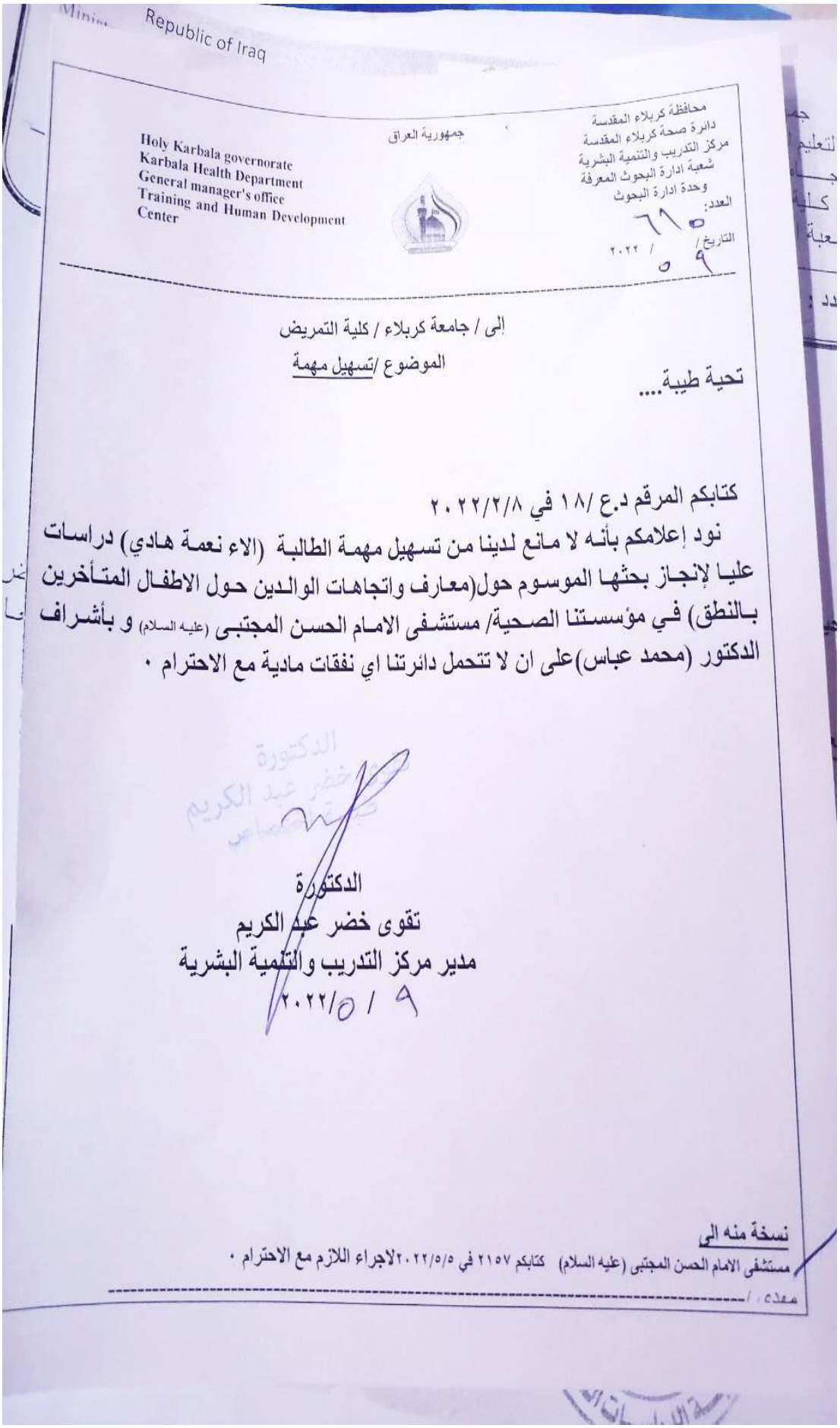

Republic of Iraq

جمهورية العراق

Holy Karbala governorate
Karbala Health Department
General manager's office
Training and Human Development Center

محافظة كربلاء المقدسة
دائرة صحة كربلاء المقدسة
مركز التدريب والتنمية البشرية
شعبة ادارة البحوث المعرفة
وحدة ادارة البحوث
العدد: ٦٨٥
التاريخ: ٩ / ٥ / ٢٠٢٢

إلى / جامعة كربلاء / كلية التمريض

الموضوع /تسهيل مهمة

تحية طيبة....

كتابكم المرقم د.ع /١٨ في ٢٠٢٢/٢/٨

نود إعلامكم بأنه لا مانع لدينا من تسهيل مهمة الطالبة (الاء نعمة هادي) دراسات عليا لإنجاز بحثها الموسوم حول(معارف واتجاهات الوالدين حول الاطفال المتأخرين بالنطق) في مؤسستنا الصحية/ مستشفى الامام الحسن المجتبى (عليه السلام) و بأشراف الدكتور (محمد عباس)على ان لا تتحمل دائرتنا اي نفقات مادية مع الاحترام ٠

الدكتورة
تقوى خضر عبد الكريم
مدير مركز التدريب والتنمية البشرية
٩ / ٥ / ٢٠٢٢

نسخة منه الى
مستشفى الامام الحسن المجتبى (عليه السلام) كتابكم ٢١٥٧ في ٢٠٢٢/٥/٥لاجراء اللازم مع الاحترام ٠

استمارة تدقيق الاقتباس النصي للرسائل والاطاريح الجامعية

عنوان الرسالة (الرسالة/ الأطروحة):

(معارف واتجاهات الوالدين تجاه تأخر النطق لدى الأطفال دون سن الخامسة في مركز السمع والتخاطب في مدينة كربلاء المقدسة)

اسم الطالبة : الاء نعمة هادي

الاختصاص العام للرسالة/الأطروحة: علوم في تمريض

الاختصاص الدقيق للرسالة الأطروحة: تمريض الاطفال

ت	المحتويات الخاضعة لتحديد نسب الاقتباس النصي	نسبة الاقتباس النصي (%)
1	عنوان الرسالة/الأطروحة	%0
2	الخلاصة	%0
3	النتائج (*)	%0
4	الاستنتاجات	%0
5	التوصيات	%0
6	طرق البحث	%0
7	الجانب العلمي (*)	%0
8	بناء المشكلة وتصميمها	%0
9	الخوارزميات (*)	%0
10	المقدمة	%2
11	الجانب النظري	%0
12	ادبيات البحث	%4
المجموع الكلي لنسبة الاقتباس على ان لايزيد عن (15%)		%6

1- (*) باستثناء العبارات الشائعة الاستخدام في مجال الاختصاص عند هذه المحتويات
2- استناداً الى كتاب دائرة البحث والتطوير المرقم (ب ت 5868/5) في 2015/7/27 الفقرة (8) تعتمد نسبة 15%
3- في حالة وجود نسبة أقتباس أكثر من (15%) تعاد الرسالة/الأطروحة إلى الطالب لغرض تقليل نسبة الأقتباس.
4- في حال وجود انتحال (سرقة) علمية (تذكر بالتفصيل والمصادر التي تم السرقة منها) ويتحمل الطالب والمشرف مسؤوليتها وتعامل على اساسها كحالة غش.

ملاحظة:-

لاتستلم الرسالة/ الأطروحة من قبل (القسم/الفرع) العلمي في الكلية لأغراض التقويم العلمي وتشكيل لجنة المناقشة مالم تحقق النسب الواردة في اعلاه.

ت	المنصب في اللجنة	الاسم واللقب العلمي	الاختصاص العام/الدقيق	محل العمل	التوقيع
1	رئيساً	أ.م.د. صافي داخل نوام	تمريض/ تمريض الصحة النفسية والعقلية	جامعة كربلاء كلية التمريض	
2	عضواً	أ.م.د. غزوان عبد الحسين عبد الواحد	تمريض/ تمريض الصحة المجتمع	جامعة كربلاء كلية التمريض	
3	عضواً	م.د. حقي إسماعيل منصور	تمريض/ تمريض الصحة المجتمع	جامعة كربلاء كلية التمريض	

Republic of Iraq
Ministry of higher education & scientific research
University of Kerbala
College of Nursing

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة كربلاء
كلية التمريض
الدراسات العليا

اقرار الخبير اللغوي

اشهد بان الرسالة الموسومة :

(Knowledge and Attitudes of Parents' toward Speech Delay among Children Under 5-Years at Hearing and Speech Center in Holy Kerbala City)

(معارف واتجاهات الوالدين تجاه تأخر النطق لدى الأطفال دون سن الخامسة في مركز السمع والتخاطب في مدينة كربلاء المقدسة).

قد جرى مراجعتها من الناحية اللغوية بحيث اصبحت بأسلوب علمي سليم خال من الاخطاء اللغوية ولأجله وقعت.

توقيع الخبير اللغوي:
الاسم واللقب العلمي: م.د. توفيق عبد احمد
الاختصاص الدقيق: علم اللغة التطبيقية
مكان العمل: جامعة كربلاء / كلية التربية للعلوم الانسانية
التاريخ: 25 / 8 / 2022

العنوان : العراق ـ محافظة كربلاء المقدسة ـ حي الموظفين ـ جامعة كربلاء
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وزارة التعليم العالي والبحث العلمي
جامعة كربلاء
كلية التربية للعلوم الانسانية
الشؤون العلمية
الدراسات العليا

Ministry of Higher Education
And Scientific Research
College of Education for
The Human Sciences
Postgraduate Studies

كلية التربية للعلوم الانسانية

العدد: ع/6/ 1535

التاريخ: 2022/8/25

إلى/ جامعة كربلاء كلية التمريض

م/اعادة تقويم لغوي

تحية طيبة...

نعيد اليكم رسالة الماجستير الموسومة بـ (**معارف واتجاهات الوالدين تجاه تاخر النطق لدى الاطفال...**) للطالب/ ـة (**الاء نعمه هادي**) بعد ان تم تقويمها لغوياً من لدن (أ.م.د. توفيق مجيد احمد).

راجين الاخذ بالتصويبات المثبتة على متن الرسالة وتشكيل لجنة مناقشة ، علماً ان الرسالة مرشحة للمناقشة من قبل الخبير...

مع التقدير

أ. د. حسن حمزة جواد
معاون العميد للشؤون العلمية والدراسات العليا
2022/ 8/ 25

نسخة منه إلى/

- الدراسات العليا.
- الصادر.

العراق- كربلاء المقدسة- جامعة كربلاء- كلية التربية للعلوم الانسانية- المدينة الجامعية (الربحة) info@uokerbala.edu.iq

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جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة كربلاء
كلية التمريض
الدراسات العليا

اقرار الخبير الاحصائي

اشهد بان الرسالة الموسومة :

(معارف واتجاهات الوالدين تجاه تأخر النطق لدى الأطفال دون سن الخامسة في مركز السمع والتخاطب في مدينة كربلاء المقدسة)

قد تم الاطلاع على الاسلوب الاحصائي المتبع في تحليل البيانات واظهار النتائج الاحصائية وفق مضمون الدراسة ولأجله وقعت.

توقيع الخبير الاحصائي:
الاسم واللقب العلمي: ا. د. شروق حميد رضا
الاختصاص الدقيق: احصاء حيوي
مكان العمل: جامعة كربلاء / كلية
التاريخ: ١٢/ ٥/ 2022

العنوان : العراق ـ محافظة كربلاء المقدسة ـ حي الموظفين ـ جامعة كربلاء
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Appendix B

خبراء تحكيم استمارة الاستبانة

ت	اسم الخبير	اللقب العلمي	مكان العمل	سنوات الخبرة
.1	علي كريم خضير	أ . د	جامعة كربلاء/ كلية التمريض	30
.2	ختام مطشر حطاب	أ. د	جامعة بغداد/ كلية التمريض	22
.3	خميس بندر عبيد	أ . د	جامعة كربلاء/ كلية التمريض	22
.4	فاطمة مكي محمود	أ .م . د	جامعة كربلاء/ كلية التمريض	27
.5	محمد باقر حسن	أ . م . د	جامعة الكوفة/ كلية التمريض	18
.6	عذراء حسين شوق	أ . م . د	جامعة بغداد/ كلية التمريض	17
.7	صافي داخل نوام	أ . م . د	جامعة كربلاء /كلية التمريض	15
.8	حسن عبد الله عذبي	أ . م . د	جامعة كربلاء/ كلية التمريض	15
.9	منصور عبد الله قلام	أ .م . د	جامعة الكوفة/ كلية التمريض	15
.10	حسام مطشر زان	أ . م . د	جامعة الكوفة/ كلية التمريض	13
.11	حيدر حمزة علي	أ .م.د	جامعة الكوفة/ كلية التمريض	13
.12	زيد وحيد عاجل	أ. م.د	جامعة بغداد/ كلية التمريض	14
.13	وميض حامد	أ. م.د	جامعة الكوفة/ كلية التمريض	11
.14	زينب جواد كاظم	**طبيبة اختصاص**	مدينة الامام الحسين ع الطبية	12

Appendix C

Part One (Demographic Information for Parents)

No	Questions	Father	Mother
.1	The questionnaire is answered by		
.2	age		
.3	Educational Level		
.4	Profession		
.5	You had a speech delay when you were kids		
.6	One of his brothers had a speech delay when he was young		
.7	Child's age		
.8	Length		
.9	baby weight		
.11	sex		
.11	The child has autism spectrum		
.12	The child stutters		
.13	The child has stuttering		
.14	The number of brothers is		
.15	**Arrange child among family members**		

Part Two (Knowledge for parents about delayed speech)

Items	Know	Not Sure	Don't Know
A: General knowledge for parents about delayed speech			
1. Speech delay: is a delay in development in use of the mechanisms that yield sound and speech			
2. Speech delays result from difficulties in understanding language			
3. Speech delay differs from language delay in that language delay: is delay in the development in using of vocabulary & linguistic knowledge.			
4. There may be a delay in the speech in the child, but it is not necessarily associated with a delay in the language.			
5. 15% of children at the age of two years have a speech delay.			
6. 70% of children under the age of two who suffer from a delay in speech can overcome these problems by the age of four years.			
B: Parents' knowledge about the symptoms and signs of delayed speech in children			
1. Speech delay is difficulty understanding speech.			
2. Delayed pronunciation is a lack of vocabulary			
3. Delayed pronunciation is difficulty using the correct words when arranging terms to form a sentence or phrase			
4. A child with delayed speech has a delay in mental development (creativity and thinking)			
5. A child with delayed speech has a delay in motor development (play).			
6. The early signs of speech delay start from the age of 12 months, when he is able to do any of thefollowing: **6-1**: Using gestures such as: waving his hand to say goodbye. 6-2: Referring to things. 6-3: Use several different consonant sounds. 6-4: loudness, 6-5: Communicate for needs			

7. Signs that appear on children between the ages of 15 and 18 months, as they show the following: "He doesn't say "mama" and "dada". 7-1: Doesn't respond when told no, hello, & goodbye." 7-2: Does not say 15 words by age 18 months. 7-3: Unable to recognize the names of the body parts. 7-4: Finds it difficult to imitate sounds.			

7-5: Preferred for gestures over verbal expression.			
8. Signs of delayed speech in children from 2 to 4 years of age include: 8-1: Suffers from inability to produce words & phrases spontaneously. 8-2: Suffers from the inability to follow simple instructions and commands. **8-3: Cannot connect two words.** **8-4: lacks consonant sounds at the beginning or end of words.** **8-5 : He suffers from a lack of understanding of the child by family members.** **8-6: He suffers from the inability to form simple sentences of 2-3 words.**			
C: Parents' knowledge of the causes of delayed speech in children			
1. Speech delay is caused by disturbances in the muscles needed to speak			
2. Delayed speech for a child with hearing problems			
3. Delayed speech occurs as a result of a child suffering from mental disorders such as autism			
4. Speech delays occur as a result of neurological disorders such as cerebral palsy			
5. Speech delays run in the family			
D: Parents' knowledge about the effects of delayed speech			
1. **Children with speech delays find it difficult to**			

communicate with their peers, which leads to psychological problems			
2. Children with speech delays have a lower level of learning skills			
3. Children with speech delays are more likely to suffer from behavioral problems			
4. Children with speech delays have a lower reading level than his peers			

Part Three Parents' attitudes related to delayed speech in children					
Question's	**Agree**	**Strongly Disagree**	**Neutral**	**Disagree**	Strongly Disagree
1. A child's learning to pronounce requires training more than twice a day					
2. Focus training on syllables, words, and repetitive phrases					
3. Making the child ask for what he wants, even in simple words, before giving him things (such as (uncle, daddy, oh, what, hey, bye					
... etc.)					
4. Encourage the child when he exercises his speaking skills.					
5. Spending enough time with the child increases pronunciation skills.					
6. Talking to the child directly improves his pronunciation skills.					
7. Using gestures when talking to a child improves pronunciation skills.					
8. Using pointing to objects when talking to a child develops articulation skills.					

9. Giving the child full attention when talking to him enhances his speech skills					
10. Allow the child to interact with other children. Improves pronunciation skills					
11. Using nonverbal methods of communicating with the child (such as eye contact, flashcards, moving pictures) enhances speaking skills.					
12. Speech delay occurs as a result of delayed growth in the child.					
13. Family problems between parents may lead to delayed speech.					
14. Immediate response to the child without letting him talk or ask for what he wants may lead to a delay in pronunciation.					
15. Not having an older brother for the child to talk to may lead to speech delays.					
16. Parents not constantly talking to the child and being preoccupied with him leads to a delay in pronunciation.					
17. Delayed pronunciation occurs in males more than females.					
18. 18. The child's failure to focus on the parents' lips while repeating the words reduces his pronunciation skills.					

Appendix D

تحية طيبة

عزيزي الاب ... عزيزتي الام ..

ان هذا الاستبيان الذي بين ايديكم هو لتقييم (معارف واتجاهات الاباء تجاه تأخر النطق لدى الاطفال دون سن الخمسة في مدينة كربلاء المقدسة) وهو جزء من البحث العلمي وان هذه المعلومات ستبقى سرية وفي اطار تطوير وتحسين الواقع العلمي والصحي

، راجين من حضراتكم الاجابة بدقة وموضوعية حول جميع الاسئلة.

مع تمنياتي لكم ولأطفالكم دوام الصحة والعافية

الباحثة: الاء نعمة هادي
طالبة ماجستير: كلية التمريض- جامعة كربلاء

استمارة الاستبيان

اولاً: أ: المعلومات الديموغرافية للأبوين

ت	السؤال	الاب	الام
1.	تتم الاجابة على الاستبانة من قبل		
2.	العمر		
3.	المستوى التعليمي		
4.	المهنة		
5.	عدد الاطفال		
	السؤال		
ب. : المعلومات الديموغرافية عن الطفل			
6.	عمر الطفل		
7.	الجنس		
8.	ترتيبه بين افراد الأسرة		
9.	احد اخوته كان يعاني من تأخر النطق عندما كان صغيرا		

ثانياً: أ. معارف عامه للوالدين حول تأخر النطق

ت	الأسئلة	اعرف	لا اعرف	غير متأكد
1	يشير تأخر النطق الى تأخر في تطور استخدام الآليات التي تنتج الكلام			
2	ينتج تأخر النطق من صعوبات في فهم اللغة			
3	يختلف تأخر النطق عن تأخر اللغة حيث يشير تأخر اللغة إلى التأخر في تطور أو استخدام المعرفة اللغوية.			
4	قد يكون هناك تأخر في الكلام عند الاطفال لكن ليس هناك تأخر في اللغة.			
5	يعاني القليل من الأطفال في عمر السنتين من تأخر في النطق			
6	يعاني معظم الاطفال دون سن السنتين الذين لديهم تأخر في النطق من تخطي هذه المشاكل عند بلوغ سن الأربع سنوات.			

ب : معارف الوالدين حول اعراض وعلامات تأخر النطق عند الأطفال حسب الاعمار

ت	الاسئلة	اعرف	لا اعرف	غير متأكد
.1	**تأخّر النطق هو صعوبة فهم الكلام.**			
.2	**تأخّر النطق هو قلة المفردات التي ينطقها الطفل**			
.3	**تأخّر النطق هو صعوبة استخدام الكلمات الصحيحة عند ترتيب المصطلحات لتكوين جملة أو عبارة**			
.4	**الطفل المتأخر بالنطق لديه تأخّر في التطوُّر الذهني (الابداع والتفكير)**			
.5	**الطفل المتأخر بالنطق لديه تأخّر في التطوُّر الحركي (اللعب).**			
.6	**تبدأ العلامات المبكرة لتأخر النطق من سن 12 شهر، حيث يكون قادر على القيام باي من ما يلي:**			
	6-1: استخدام الإيماءات مثل: التلويح بيده للوداع.			
	6-2: الإشارة إلى الأشياء.			
	6-3: استخدام عدة أصوات متناغمة مختلفة.			
	6-4: علو الصوت			
	6-5: التواصل لطلب الاحتياجات			
.7	**علامات تأخير النطق التي تظهر على الأطفال الذين تتراوح أعمارهم بين 15 و 18 شهرا ، إذ يظهر عليهم ما يلي:** **لا يقول "ماما" و"بابا.".** **7-1: لا يستجيب عند إخباره "لا"، "مرحبا"، و"وداعا."**			
	7-2: لا ينطق 15 كلمة عند الوصول لسن 18 شهر.			
	7-3: غير قادر على التعرف على اسماء أجزاء الجسم.			

	4-7: يجد صعوبة في تقليد الأصوات.				
	5-7: يفضل للإيماءات على التعبير اللفظي.				
.8	**علامات تأخير النطق عند الاطفال بعد سن سنتين حتى سن 4 سنوات تشمل:** **1-8: يعاني من عدم القدرة على إنتاج الكلمات والعبارات بعفوية.**				
	2-8: يعاني من عدم القدرة على اتباع التعليمات والأوامر البسيطة.				
	3-8: لا يستطيع الوصل بين كلمتين.				
	4-8: يفتقر إلى الأصوات المتناغمة في بداية أو نهاية الكلمات.				
	5-8: يعاني من عدم فهم الطفل من قبل أفراد الأسرة.				
	6-8: يعاني من عدم القدرة على تشكيل جمل بسيطة مكونة من 2-3 كلمات.				

ج : معارف الوالدين عن اسباب تأخر النطق عند الأطفال

ت	الأسئلة	اعرف	لا اعرف	غير متأكد
.1	**يحدث تأخر النطق نتيجة الاضطرابات في العضلات اللازمة للتحدث**			
.2	**يتأخر في النطق الطفل الذي يعاني من مشاكل في السمع**			
.3	**يحدث تأخر النطق نتيجة اصابة الطفل باضطرابات عقلية مثل التوحد**			
.4	**يحدث تأخر النطق نتيجة الاضطرابات العصبية مثل الشلل الدماغي**			
.5	**يحدث تأخر النطق بسبب وراثي في العائلة**			

د: معارف الوالدين حول تأثيرات تأخر النطق

ت	الأسئلة	اعرف	لا اعرف	غير متاكد
1	**الأطفال الذين يعانون من تأخر النطق يجدون صعوبة في التواصل مع أقرانهم مما يؤدي الى مشاكل نفسيه لديهم**			
2	**الأطفال الذين يعانون من تأخر النطق لديهم انخفاض مستوى الطفل في تعلم مهارات**			
3	**الأطفال المصابين بتأخر النطق هم أكثر عرضة للمعاناة من مشاكل سلوكية**			

4	الأطفال الذين يعانون من تأخر النطق لديهم انخفاض مستوى الطفل بالقراءة مقارنة بأقرانه				

ثالثاً: اتجاهات الوالدين المتعلقة بتأخر النطق عند الاطفال

ت	الأسئلة	اوافق بشده	اوافق	محايدً	لا اوافق	لا اوافق بشده
1.	يتطلب تعلم الطفل على النطق تدريبه اكثر من مرتين يوميا					
2.	تركيز التدريب على المقاطع، الكلمات، والعبارات المتكررة					
3.	جعل الطفل يطلب ما يريد ولو بكلمات بسيطة قبل اعطائه الاشياء مثل (عم ، بابا، اوا، ما ، هييي، باي ... الخ)					
4.	تشجيع الطفل عندما يمارس مهارات التحدث.					
5.	قضاء وقت كافي مع الطفل يزيد من مهارات النطق.					
6.	التحدث مع الطفل بشكلٍ مباشر يحسن من مهارات النطق.					
7.	استخدام الإيماءات عند التحدث مع الطفل يحسن من مهارات النطق.					
8.	استخدام الإشارة إلى الأشياء عند التحدث للطفل يطور من مهارات النطق.					
9.	إعطاء الطفل كامل الانتباه عندما يتحدث معه يعزز مهارات النطق.					
10.	السماح للطفل بالتفاعل مع الأطفال الآخرين. يحسن من مهارات النطق					
11.	استخدام الطرق غير اللفظية للتواصل مع الطفل (مثل الاتصال بالعين، بطاقات تعليمية، الصور المتحركة) يعزز مهارات النطق.					
12.	يحدث تأخر النطق نتيجة تأخر النمو عند الطفل .					
13.	المشاكل الاسرية بين الوالدين قد يؤدي الى تأخر النطق.					
14.	الاستجابة الفورية للطفل دون تركه يتحدث او يطلب ما يريد قد يؤدي الى تأخر النطق .					
15.	عدم وجود اخ اكبر للطفل للتحدث معه قد يؤدي الى تأخر النطق.					
16.	عدم تحدث الوالدين باستمرار مع الطفل وانشغالهم عنه يؤدي الى تأخر النطق.					
17.	يحدث تأخر النطق عند الذكور اكثر من الاناث .					
18.	عدم تركز الطفل على شفاه الابوين اثناء تكرار الكلمات يقلل من مهارات النطق .					

الملخص

الخلفية: يحدث "تأخير الكلام" عندما لا يصل الشاب إلى مراحل الكلام المتوقعة في عمره الزمني. تمنع الحواجز اللغوية الشاب من التواصل بنجاح ، وستظهر الغالبية العظمى من الأطفال علامات ضعف أكاديمي واجتماعي طويل المدى. هناك احتمال أن يكون التأثير محسوسًا. هناك مشكلات تتعلق بالكلام القابل للفهم ، والذاكرة العاملة ، والمفردات المعقدة ، على سبيل المثال لا الحصر.

الهدف: التحقيق في معرفة الوالدين تجاه تأخير الكلام بين الأطفال دون سن 5 سنوات وأيضًا لتحديد العلاقة بين الوالدين الاجتماعي الديموغرافي مثل العمر والجنس ومستوى التعليم وعمل الوالدين وموقف الوالدين تجاه تأخير الكلام.

المنهجية: استخدمت دراسة مقطعية وصفية. إجرية الدراسة في مركز السمع والنطق في مدينة كربلاء المقدسة في العراق. وتم استخدام عينة غرضية ملائمة غير احتمالية من 100 من أطفال الوالدين دون سن 5 سنوات الذين يعانون من تأخر في الكلام لتحديد مدى الملاءمة. تم تحليل البيانات بواسطة برنامج (SPSS) اصدار 22.

النتائج: توصلت الدراسة إلى ضعف في مستويات حول تأخر النطق بين الأطفال دون سن الخمسة. ايضا اظهرت وجود علاقة ذات دلالة معنوية بين معارف الابوين وتوجهاتهم حول تأخر النطق بين الاطفال دون سن الخامسة و بعض الخصائص الديموغرافية لعينة الدراسة وفقًا لاختبارات مربع كاي وفق القيمة المعنوية.

الخلاصة: استنتجت الدراسة الحالية ان معظم اجابات المشاركين هن من الامهات شكلوا (76%) من عينة الدراسة، وفق اعمار الاباء، اغبيهم من الفئة العمرية (26-35) سنة شكلوا 41% وكذلك اظهرت مستويات متدنية من نعارف الاباء وتوجهاتهم تجاه تأخر النطق الأطفال دون سن الخامسة، وكذلك اظهرت مستوى ضعيف الى متوسط من توجهات الاباء تجاه تأخر النطق الأطفال دون سن الخامسة مما يؤدي إلى تأخير في التشخيص والعلاج و تأهيل.

توصيات: تشجيع الآباء على حضور جلسات ومحاضرات تدريب السمع والنطق لأبنائهم وإعطاء فكرة واضحة عن الدور المهم الذي يلعبه الآباء في علاج والعناية بتأخر النطق. التركيز على التشخيص المبكر لأي اضطرابات في النطق من قبل الآباء والمعلمين ومقدمي الرعاية ، من خلال إعداد محاضرات وملصقات حول اضطراب الكلام وكيفية تشخيص هذه المشكلة. إيلاء اهتمام خاص للأطفال (الذكور) عند التعامل مع اضطراب الكلام.

جامعة كربلاء/كلية التمريض

معارف الوالدين واتجاهاتهم تجاه تأخر النطق لدى الأطفال دون سن الخامسة في مركز السمع والنطق بمدينة كربلاء المقدسة

رسالة تقدمت بها

الاء نعـمة هــادي

الى مجلس

كلية التمريض/ جامعة كربلاء

جزء من متطلبات نيل درجة الماجستير في علوم التمريض

بإشراف

م.د. زكي صباح مصيحب

محرم 1444هـ **أب 2022 م**