

- * group conversation → Problem in turn taking, not asking for clarifications
Can't clarify, not repairing any breakdown...
- Phonological deficits: on the level of acquiring phonemes,
or on phonological awareness
↳ important for ~~literacy~~ literacy
- Problem in perceive, Process inf. because of certain cognitive
~~abilities~~ problems.
- non word repetition task: - we depend on phonological short term
memory of the child.
- Phonological Problem relates to reading decoding.
- Hyper activity disorder (ADHD) → Causes SLI (mostly) or
Lang. Disorder in general.

Hearing impairment

- no relationship b/w hearing impairment and cognitive abilities.

~~close~~ cleft palate / cleft lip / allergies $\leftarrow$ medical conditions
* lang: -

- mostly at all aspects but the most affected lang. use and morphology.

- morphology $\rightarrow$ markers.

- ~~mostly~~ deaf children born to deaf parents $\Rightarrow$ so they use sign lang.

- have social issues.

deaf $\leftarrow$ لا يسمعون $\leftarrow$ hearing comm. $\leftarrow$ يدخلون على

* three important issues: -

① most of deaf children are born to hearing parents.

- فذلك يعود للأسرة من قبلين انهم يستعملون sign lang.

- بالغالب والدهم يتكلمون اللغة الأم متأخرين

- bilirubin $\rightarrow$ المادة الصفراء التي تأتي من جلدنا

- من الصفراء $\rightarrow$ من خلاصة الدم $\rightarrow$ تتجمع في كبد الجنين $\rightarrow$ فيبقى عند الطفل أي متراكمة كبيرة.

② in the signing lang., there are individual differences in lang. competence.

- هذا يعني أنه لا يوجد لغة واحدة جماعية وكل واحد له أسلوبه Standard

③ when we make screening at birth mean that hearing loss is now identified at birth.

- FDA $\rightarrow$ Food and Drug administration.

يقوم

١٠ - العلاقات تبدأ بالظهور مبكراً جداً والتشخيص يتم على عمر ٣٠-٣٦ من قبل Psychiatrist

② Psychologist ③ Pediatric neurologists

↳ Why after 3 years?

- because the social demands at that age exceeds the capacity so the gap start to appear and we know can diagnose ASD

- Deficits in Social comm:-

① Deficits in social-emotional reciprocity

② ↳ ↳ non verbal communicative behaviors used for Social interaction → indicators (فردية) facial expressions

③ ↳ ↳ developing and maintaining relationships
↳ ↳ العلاقات مع الأم ← يتغير مع تطور الطفل ← الأخت

→ ASD كان قديماً (قديم) lang and speech verbal (لغوي) ASD + normal speech lang dev Or ASD + abnormal speech and lang dev.

→ ASD + normal speech lang dev Or ASD + abnormal speech and lang dev.

- Restricted repetitive behaviors (سلوكيات متكررة)

Early comm:-

at risk ASD →

genetic risk (وراثي)

- in the first year are indistinguishable especially in social beh.
- Social interaction beh. become more apparent at the b/w end of the first year and the 2nd birthday

يقوم

١٠ - العلاقات تبدأ بالظهور مبكراً جداً والتشخيص يتم على عمر ٢٧-٣٠ سنين من قبل Psychiatrist

② Psychologist ③ Pediatric neurologists

↳ Why after 3 years?

- because the social demands at that age exceeds the capacity so the gap start to appear and we know can diagnose ASD

- Deficits in Social comm:-

① Deficits in social-emotional reciprocity

② ↳ ↳ non verbal communicative behaviors used for Social interaction → indicators (فردية) facial expressions

③ ↳ ↳ developing and maintaining relationships
↳ ↳ العلاقات مع الأم ← يتغير مع تطور الطفل ← الأخت

→ ASD كان قديماً (قديم) lang and speech verbal (لغة) ASD + normal speech lang dev Or ASD + abnormal speech and lang dev.

→ ASD + normal speech lang dev Or ASD + abnormal speech and lang dev.

- Restricted repetitive behaviors (سلوكيات متكررة)

Early comm:-

at risk ASD →

genetic risk (وراثية)

- in the first year are indistinguishable especially in social beh.
- Social interaction beh. become more apparent at the b/w end of the first year and the 2nd birthday

ADHD

- one of the most important deficits.

- $\text{يُؤثر بشكل كبير على مهارات التعلم}$
- etiology - جينات بيولوجية biochemicals
 $\text{في تفاعل مع البيئة}$ environment

- mostly:- there is a problem in the neural circuit in the frontal lobe $\downarrow$ left

- Premature and with low or very low birth weight
 $\rightarrow$ have higher risk.

- mostly for every learning behavior we need attention
 $\rightarrow$ they have deficits in controlling their attention.

* 2 components:-

- ① inattention

② hyperactivity

- onset before 12 years.

- the symptoms must present for at least 6 months

- at least at 2 environmental settings] symptoms appear.

- Fidgets $\rightarrow$

- m:-

الحركة الزائدة
 أو التشتت

Cognitive abilities

- $\text{لا يوجد علاقة بين ADHD و cognition}$

impaired EF

* lang. abilities are variable

- Co-morbidity:-

→ is higher than expected

المرتبة / الترتيب

- both DLD and ADHD results in some kind of malfunctioning in the neural circuits in left Frontal lobe
→ so they don't know which come first

Form

- no abnormalities in phonology

- temporal processing difficulties → make a problem in rapid word naming and matching names with object.

Content

- Problem in naming tasks

- have problem in accessing the lexicon.

→ because they have a problem in the working memory ~~because~~
↳ the attention problems they have ~~so~~ causes the working memory not picking up the words and ~~not~~ ^{not} storing the words in the proper place and the proper way. ~~not storing~~

Use

- most problematic area

مجال استخدام اللغة / استخدام اللغة
ASD more problematic area

literacy

- have high reading Disorder rate

- Prevalence of reading Disorders is 5%.

ADHD 5%.

- 40% - 25% prevalence of reading disorders

Langy :-

form:-

- after cooing and gooing he stops because he can't hear the feedback from the parents.
- have problems in high f speech sounds $\Rightarrow$ sibilants.
 $\hookrightarrow$ either disordered or not acquired.
- Sounds with very weak acoustic cues $\Rightarrow$ Final consonant deletion
 $\hookrightarrow$ سكتة، قطة، حمار
- general weak syllable deletion $\Rightarrow$ either initially or medially
unstressed $\hookrightarrow$ mostly initial syllable
- Cochlear implantation children follow the trajectory of sounds once they start to perceive and receive words.

Content :-

- Vocabulary delayed

Use :-

- Sec:-
- working memory are not subjected to certain ^{the new signing lang.} ^{Scapols} ^{for}
 - non-native sign.

- tetracy :-

written is better than reading.

* impulse control →

الذفا عن دة كبر

* lang. chara. :-

- expressive lang. is more impaired.

and programming.

- apraxia → motor planning disorder → neurogenic disorder

- first word is very delayed

- Vocabulary is lower than their peers.

- phonological short term memory →

الذفا عن دة كبر

والذفا عن دة كبر

- DS have more social interaction than their peers.

ASD

- ASD ^{general pervasive developmental disorder}
 APA تسمية جديدة عن طريقه autism وكان يركز على نفع واداء
 الاضطراب القوي كان autism وكان يركز على نفع واداء developmental disorder

- ASD $\Rightarrow$ (1) Deficits in social comm. and interaction
 (2) restricted repetitive behaviors, interests and activities

$\rightarrow$ (1) specific non functional routines.
 - حركات أو أشكال التفاعل باليد
 - ليست ذات فائدة $\rightarrow$ يرتبوا أنماطهم الخاصة / بالكلية بنفس الطريقة وفي الأوقات
 لا يوافقون على نظام معين في عرفتهم ويقاسموا برفض أي تغيير

(2) repetitive motor movements $\Rightarrow$ حركات جسمية معينة $\rightarrow$ رفرفة اليد /
 الترتيبات الصارفة المتكررة / need nodding

(3) pre occupation with parts of objects $\Rightarrow$ يشغله أجزاء الأشياء
 (4) hyper sensitivity or hypo sensitivity to sensory input

ASD umbrella :-

- 1- autistic disorder
- 2- asperger's
- 3- childhood Disintegrative $\rightarrow$ مع مرور الوقت يفقد المهارات
- 4- other pervasive DD non specified

* new category $\Rightarrow$ Social comm. Disorder
 $\Rightarrow$ have social comm. problem but without any
 restricted repetitive behaviors

Down Syndrome

- أدمج عدم أشكال الانكسار intellectual disability

- ID severity in Down syndrome b/w mild to moderate.

- IQ = 70 → 40

↳ norms of IQ 100 → 70+ is acceptable.

- Chromosomal etiology → 21 trisomy. (chromosomal disorder)

- CD Down Sy. الجين الوراثي لا يرتبط لذلك يعتبر Down Sy. CD
genetic

21 trisomy → is the typical DS feature

لأنه في 14/18 trisomy لا يوجد بحد ذاته شدة
باعتبارها شدة أقل

* DS in the increased maternal age is more common.

* muscle tone → وقوة شد العضلات في حالة الراحة

* DS have hypsnia → الدثرة أو عدم اليقظة

* micrognathia ⇒ abnormal small mandible (chin) ⇒ microgenia.

* ear infection because of eustachian tube abnormalities and the acid.

* marked deficits of working memory.

* EF is affected on the level of flexible thinking / planning / self inhibition

* Visuospatial working memory → الذاكرة البصرية المكانية

- Enhanced milieu teaching:- $\frac{\text{لغة}}{\text{البيئة}} \rightarrow \text{تعلم اللغة}$
(Part of milieu teaching)

* Specific lang. impairment (SLI)

- Primary may affect any lang. aspect.
- a type of Primary lang. disorders.
- it affects a certain aspects (morphosyntax) لغة
Vocabulary $\frac{\text{لغة}}{\text{البيئة}} \rightarrow \text{تعلم اللغة}$
- without any hearing / intellectual / organic ~~causes~~
- mostly ~~comes from~~ ^{because} environmental context of the child
 $\frac{\text{لغة}}{\text{البيئة}} \rightarrow \text{تعلم اللغة}$
- Prevalence 7%.
- more in males.
- they take much more longer time to comprehend / process these features (morphosyntax)
- Syntax:- mlu is a very important clue that we have an issue in syntax $\rightarrow$ in SLI mlu is delayed 3-3.5 years (lagging behind ~~the~~ his peers)
- morpheme:- an apparent delay in diff. types of morphemes.
- Children with SLI:- when they enter the school they have a problem ~~in~~ with the more advanced lang $\rightarrow$ ex:- embedded clauses

- Word retrieval problems $\rightarrow$ didn't acquired enough words
 $\rightarrow$ organized them wrong (acquired it wrong)
 $\rightarrow$ Problem in working memory
 $\rightarrow$ comprehension problem

, this problem appear in Pic naming tasks

- Problem ^{learning new} ~~new~~ words and problem connecting them (19)

Intellectual Disabilities

we measure:-

- ① IQ
- ② adaptive behaviors
- ③ symptoms before 18

Diagnosis require that:-

- ① limitations in present functioning when we compare it with his environment.
- ② in ass we have to take in consideration the cultural differences.
- ③ limitations often coexist with strengths.

* IQ test target intellectual disability of problem solving / learning / reasoning. (higher functions)

IQ test is (operationalized) "لماذا لا يفهم؟"

* Adaptive Behavior Skills:-

- ① Conceptual Skills:-
- ② Social Skills:- interpersonal skills
- ③ Practical Skills:- daily living skills

* AB they have to be according to his cultural, linguistic and ethnic group.

Cognitive charac:-

- ① delayed developmental trajectory

← literacy
← cognitive
← speech
← language
← AB

- Cog. charac.

50% - 70% $\Rightarrow$ have nonverbal IQ less than 70 $\Rightarrow$ ID

28% $\Rightarrow$ average IQ

3% $\Rightarrow$ above the average

* EF is impaired

* Deficits in social cognition

* Problems in learning new words

- lang :-

- significant percentage of children with minimal lang. skills.
but develop some spoken lang. by 9

- 9% ~~with~~ ^{remain} nonverbal

form:-

- nonword repetition ~~problems~~ is poor

- Rhyme awareness is poor

- ~~Prossody~~ fewer grammatical morphemes.

- short simple sent.

~~sent~~ - sent. repetition is poorer

Content:-

- vocabulary is ~~lower~~ restricted

- every word have semantic inf. $\Rightarrow$ they do not use it

$\hookrightarrow$ encoding $\rightarrow$

$\hookrightarrow$ recall $\rightarrow$

بوجہ نیک و بد کیلئے اس
دین کی بات و حد علیہ ان تذکر

Executive Functioning:-

- working memory
- Planning
- problem solving.
- time scheduling
- task initiation
- completing task
- self monitoring
- flexible thinking
- self inhibition.

↳ they are ^{strongly} impaired and affected in the ~~EF~~ ID ^{people} children.

ABJL: IQ JL EF

Lang. Chara.:-

- lang. Delay.
- nonverbal lang. Delayment $\Rightarrow$ especially at the first mon. (early stages)
- first word delay.

- 50% nonspecific ID lang abilities ^{their} with nonverbal abilities of
- 25% expressive affected more than comp. skills
- 25% exp. + comp. affected the same

form. - acquisition sequencing is the same as normal but in slower way. Pace.

use:- pragmatic competence $\rightarrow$ $\frac{\text{pragmatic}}{\text{competence}}$

literacy:-

- Problem in reading, writing.
- the ability of reading is better than reading with comp.