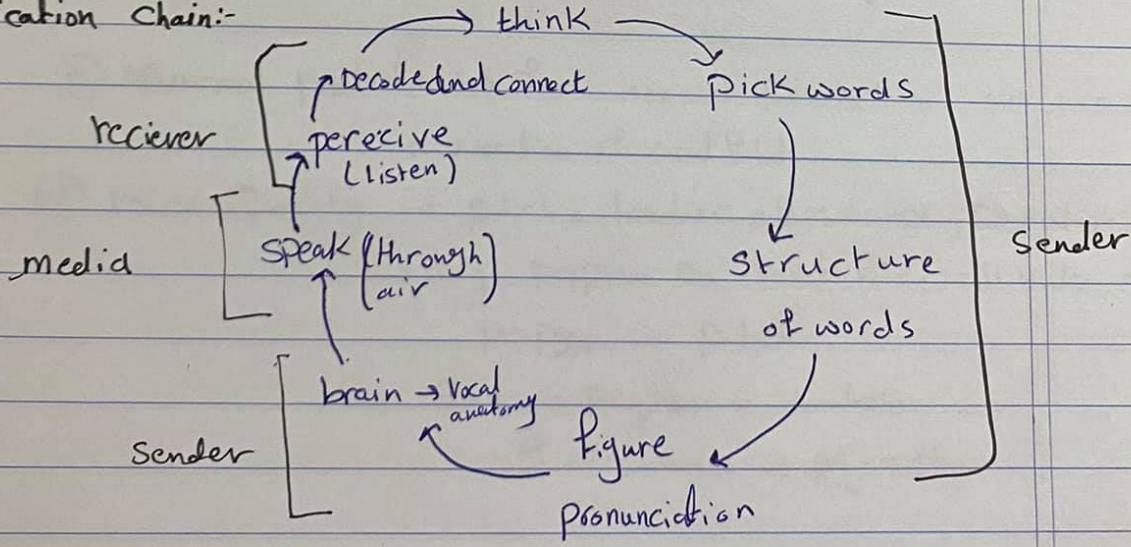
Communication:- - if we don't have codes we don't have communication
- we need people (Sender and reciever)
- the media depend on the type of the message.
- the reciever must have attention to get the message
- is the proccess to send a message from a sender to a reciever in a media.
- if we have any proplem in one of these factors, we have **communication disorders.**
- the most senses we use ~~as a sender is~~ in the process is hearing and seeing

Effictive Communication:- is the communication ~~that~~ that happen in less effort from the Sender and the reciever.
while ~~Sending the me~~ communicate.
↳ * less effort to Send the message by the Sender
* Less effort to recieve the message by the reciever

Communication Chain:-



* Primary and secondary

① down syndrom → have a chromosome disorder which is primary
→ this disorder make other proplems lik articulatory ... which is secondary.

while if someone have articulatory proplems that didn't come from another proplem ⇒ these proplem primary here.

So if a disorder happen in response to abigger disorder. → big is Primary
→ & response is secondry

While if a disorder happen by itSown without having abigger disorder it is primary.

Communication disorders:- it happens when ↑ if we have any problem with the sender or the media (environment) or the reciever

* if the sender have ↑ simple speech problem but the reciever's speech intiligibility is ↓ is easy → the sevirity of the sender is lower. ↓ to understand it

* while if the sender have a major problem, the reciever speech intiligibility is hard ↓ → the sevirity is higher. ↓ to understand it

* Speech disorders:- Any disorder in the process of speaking

① Production of speech sound → phonological
→ articulatory

② Flow of speaking → normal flow make an efficient comm.
→ unnormal " " speech disorder

③ Abnormal production:→ for normal production we need a vibration of vocal folds.

④ Voice Quality → pitch, loudness, Resonance, Duration.
→ any problem on Vocal Folds, will make a problem in Pitch.
→ ~~قوة~~ → problem in loudness
→ or inResonance → ~~في~~ [nasophyrnex]

~~* language Disorders *~~

→ Repetition → on a sound or a syllable
→ blocking → stop on a sound.

Types of Disorders :-

* ① organic problem (disorder) → on an organ that participate in the production or precpiction (brain)

* ② non organic disorders → enviromental
→ organs are well.

* ③ Functional disorders → we don't know the reason for the problem

* language disorders:-- Language :- is a number (group) of symboles (codes) that people in the same community use to express themselves

- every language has its own rules that connect the symboles together. [is socially shared codes use to represent concepts]

Domains of the language

① receptive lang. :- the ability in people to process the message I get to know how to response. and feedback. (ability to understand words)

⇒ if we can't proceess the message and analays it → this will cause a wrong response so the communication chain is not complete. so we have a proplem (disorder)

④

* normally the baby get his first word in 12 moneths
* ~~no~~ normal range from 6 - 18 monthes.
* if we say to a child (open the door) and he close it, he have a problem in (~~receptive~~ lang.)
~~expressive~~ receptive

(2) expressive lang. :- the ability to use words to express him/her self

* when a child have problem in it, he won't use the right words in speech or the right tense

* if a child say "I goed" or "I going" ~~, he is~~ that means he has (expressive lang. problem)

Language aspects :- [(1) phonology (2) morphology (3) syntax (4) semantics (content) (5) pragmatics (use

~~(phonology)~~ (form)

phonology and morphology -> the rules of the word

syntax -> ~~how~~ the words ~~are~~ ordered in a sentance
-> if we change the order, the meaning change.

Semantics => semantic features => group of meanings that come together to explain the sentance.

Pragmatics => the driving force behind all aspects of lang.
=> studies the factors that govern our choice of lang. in social interactions and the effects of our choice ~~in ward~~ of words on others

* Hearing disorders:- Different types of it:-

① Hearing loss:-
② Central auditary proccesing
Disorder (CAPD) => ear and brain do not work well together
=> you can hear but the brain has trouple Processing the sound

means of non verbal :- not using a speech language.
- symbolls & gestures
- supra segmantals and non locales
- help people to understand with verbal

Supra Segmantals:-

*artifacts:- - the way to decorate your environment
- using songs, music...

* ~~Kenisic~~ Kinesic body language, posture, moving hands head, shoulders ....

~~explesible~~ explicit :- stated clearly and in detail
- leaving no room for confussion or doubt

implicit :- implied and not stated directly
- not clear as explicit.

* Space and time :- time orientation and place orientation

* Touching :- the way I touch the person and my hands gestures

-Non verbal are so important in comunication

*we use communication ine every stage of our life.

- the stage you are in make the way you talk, the body language and the disorder you heave

Childhood communication disorders:- from day 1 to school
- developmental or born with a disorder or after birth

Table 2.2 page 55 and 2.1 page 45

ASHA → American Speach language hearing association
⇒ Just association not a university ⇒ organize the work of audiogests & SLP
ASHA definition of communication disorders:-

disorders in ① Speach (articulation, fluency, resonance, voice)
② language (form, content, use)
③ Swallowing: it happen in the same places where speech prod occure
④ orofacial disorders:- abnormality in lip, jaw, tongue position ..etc.
- may cause speach or/and language disorders
- problem in the oral cavity or face.

⑤ Cognitive communication:- difficulty with any aspect of communication that is affected by distribution of [cognition] → إدراك
- for ex:- attention, memory, problem solving ...etc.

⑥ Hearing and balance:- Hearing is the major input sense. after it comes Vision.
- ~~Spoken~~ the major in spoken lang. is Hearing while Vision is important in communication.

CAPD is the same (* in this semistar) as APD ⇒ central → CNS
3 the loss may be:-
① Conductive loss → damage in outer or middle ear
⇒ hear sounds too soft.
② Sensorineural loss → inner ear and cortex and ? nerves (auditory)
③ mix → combination of both (conductive + sensorineural)

balance :- - the controlling system of it is in the inner ear
- ~~the nerves~~ is a part of motor nerves So the balance is important in movement.
- Auditory nerve , ~~vestibulocochlear~~ vestibulocochlear nerve ⇒ hearing and balance
- if we have a problem in balance we may have a problem in inner ear.

*swallowing and balance are not a basic ~~appeared~~ , major communication Problem but we still consider it a part of it
*communiction is sending , recieving massages. and also proccising.
*may be ~~is Categorized~~ it in :-

① reception :- recieving throug hearing , vision , taste , ...
not only recieving is important.

② ~~Proccing~~ processing :- in brain , processing inf. you recieve is very important , if you don't process and analays the communication will not occure.

③ expression :- speach and language.

④ Etiology:- the origin of the disorder.

⑤ Time of onset:- the period of time that the disorder take from the symptomes starts to healing.

- congenital → genetic in employee along the pregnancy period and at birth
- aquired → illness comes from accident or environmental impact

⑥ severity :- if it is normal → we don't have disorder
- border line → may have disorder or not
- mild then moderate then severe
- at last profound ⇒ the top severity, the hardest.

Prevalence and incidence

↓ ↓

People who have a disorder. (new and old cases)

new cases

- **Audiologest:-** Specialists that measure hearing ability and identify, assess, diagnosis manage and prevent disorders of hearing and balance.

- **Speech-language Pathologists (SLP):-** Professionals who provide ~~a van~~ a variety of services related to communication disorders.
  - they identify, assess, prevent and treat communication disorder in all forms (spoken, written, Picotrial and manual) + disorders of swallowing, modifying a dialect...

* Disorders treating Progress:- (what I do as a SLP or audiologist)

- ① identify:- ~~Causes of the problem and~~ to say if we have a problem or we don't have.

② assess (diagnos):- the nature of the disorder, symptomes, severity, Causes, prognosis, Type of disorder, in which domain, effect of the disorder in our communication.

* using assessment we build the treatment program.

* treatment program:- the steps that we will follow in the treatment - it's diffrent than treatment

③ treatment:- reflecting the treatment program and following ~~it's~~ the steps we put in it. (لازم يجي بعد assessment)

④ prevention:- we have 3 steps or types of it which is are
1. primary prevention
2. secondary prevention
3. teritary prevention

Types of Prevention:-

① Primary Prevention:- intervening before the Communication disorders occure. by rising the awerness in the community to prevent this disorder from happening.

② secondary prevention:- Screening to identify the disorders in the earliest Stages to reduce or mitigate the disorder's impacts and effects.

~~Stress~~

③ Teritary prevention:- -if I couldn't prevent the disorder from happening or reducing the effects ,we use this time
- it limit the consequences of the disorder.

~~stress/asd~~

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* Look at the child as a whole.
↳ I look at everything not only communication, I look at physical, attention, behaviors....

Assessment & intervention

Assessment of communication:- The process of gathering information
- * Type of disorder
- * case history ; medical, family, clinical, develpomental, educational history
- * pregnancy and birth

↳ these information we use to reach diagnostic stetment

* we need also direct inf. to reach findings useing diffrent assessment tools. depend on the nature of the disorders and the age of the client.

* we have 2 types of tools:-
① formal tools:- للمصداقية ، الثباتية ، أثبتت قدرتها على الاختبار منها ، مبنية لمجموعة معينة
② informal tools:- يبنيها بطريقتي الخاصة لفحص أمور معينة.

* after we collect data, we analayz it and interpret it to diagnose communication disorder, to make plane and diagnostic statment to treat this disorder.

Assessment Goals.

* Verification of communicat problem.
* not all clients that we made assessment to need treatment.
* diagnosis and diagnostic therapy
* Description and Quantification of Deficits and strengths
  ⇒ Baisline (نقاط الضعف والقوة)
* statment of severity :- Look at the weakness points and the Delay and the strength points in the case.

* Etiology:- *the cause is the main thing we must know, to change it and stop it.
  * we target symptoms in general but we also must look at the cause, because even if I remove the symptoms, and the cause is still not solved, the treatment of the symptoms will be useless.

Etiology:-

① - predisposing cause:- the underlying cause

② - precipitating cause:- the factor triggered

③ - maintaining cause:- keeps the problem going.

④ - organic / somatogenic cause:- known physical cause

⑤ - functional / psychogenic cause:- elusive, idiopathic of no identified physical or organic causes.

* Depend on all this we put the treatment plane.

* Prognosis :- Prediction of the outcomes

* Look at the client as a whole.

Assessment procedures

* Authentic data:- ~~look at the client as a whole~~.

- actual real-life inf. in sufficient quantity to make accurate decision.

* most of the communication disorder are sensory.

* the most accurate diagnosis reached by using multiple inf. resources, reports, measures and tests. ~~we can reach~~

Adults have aquired disorders that they get after accedients or as aresult of adulthood.

* for ex:- ~~Strokes~~ stroks, AL Zahaimar, C~~P~~A ⇒ Cerbro vascular accedent

* ~~CPA~~ CVA :- الدورة الدموية ممكن يصير فيها خلل نتيجة لانسداد الشرايين أو انفجار لهذه الأوعية إلي بتوصل لأماكن معينة بالدماغ فتموت خلايا هناك

* بيصير عنا اختلاف حسب العمر أو الحادث اللي بصير فبأدي إلى أنواع مختلفة من المشاكل.

* الصغار من ~~..~~ من الولادة فما بكتسبوا مهارات ال lang. و communication

* الكبار بتكون مكتسبة فبكون عندهم المهارات ~~..~~ ومكتسبينها خلال مراحل عمرهم بس المشكلة بتكون بأثر بأثر عليهم.

* Age is the most important thing to know ~~to~~ for assessment and inervention and it ~~..~~ affect the type of the disorder and the nature of it and which domain ~~it the~~ have the proplem.

* Developmental level:- early identification. form of Communication varies with child age.

* Evidence-Based practice:- Practice based on scientific evidence. or research

~~Developmental level:-~~

⇒ there are diffrent things we see in comm. ~~which~~ and is verions phenomens that affect behaviors.

⇒ we target behaviors (gestures, body lang., using ass. tools) these behaviors must stay in a rang. if it's lower than the rang the sender and reciever will make more effort. and if it's upper it affects the ability to understand the message by the reciever.

Diffrences Vs disorders

Diffrences ⇒ every communication have there own type of comm. like lang :- arabic, english... and dialects ⇒ ~~life~~ and multilingualism and bilingualism.

⇒ Diffrences don't mean disorders.

Disorders:- Diffrence in a specific, known, stable thing.

=) Bilingualism =>

Someone who live in USA and talks english and arabic.

=) if the problem is in the main (first) language we have disorder

How to make the ~~evalution~~ evaluation and the assessment :-

=) case History :- ① Family history

② birth and preg. & Disorders

③ Medical History :- accicdents, disorders ...

④ educational History :-

⑤ Proffitional History :- for adults

where he works, the nature of it.

=) opening interviews :- with the ~~patio~~ client or the family

=) questions that we collect inf. with to make ~~reach~~ the case History

=) when we collect data we can make direct assessment.

Systematic observation ⇒ مراقبة عامة للشخص ، كيف بتحرك ، كيف بعكس اللغة وسلوكياته العامة ، كيف بحكي ، بتعامل ...
and [performance skills]:- communicative skills

↳ attention , eye contact ، كيف بستخدم المهارات الاتصالية المختلفة

↳ by Structured observation ⇒ بنبني مهام معينة ونعطيها للـ client عشان يسويها (مهام عامة) ونراقب أداء الـ client وهو بقدم بها كالمهام.

↳ (غير) non-structured observation ⇒ كيف بتعامل معنا ، مع اللي حوليه وكيف تتفاعل معنا والمهارات العامة ...

Sampling ⇒ you make a record (audible record or written...) for the Communication of the client.

⇒ for ex:- we give the client a pic. to discribe or a paragraph and we record his lang., way of comm., speech, fluency, then we take it and analysis it by diffrent types of tools. to reach diagnosis.

Orofacial examination:- structural and functional examination of the peripheral speech mechanism.

⇒ procedure we use to check the structure of the organs of communication in the mouth ⇒ ex:- ① soft palat, hard palat, uzula, tongue, teeth ⇒ that participate in articulation

② uzula, velum, tonsils ⇒ " " resonance

⇒ oral and nasal cavity are important structures in ~~the pace~~ communication in voice, swallowing, speech ⇒ we need to check them to see if we have any structural or functional problems in them.

* we check 2 integrities in these structures:-

① Functional integrity

② Structural integrity

(we check and measure)
=) ?(نفحص) the articulatories :- size, color, any problem in it.

(we look at)

=) teeth :- if we have problem in it, in the closure, over bite, under bite

=) hard palat :- any problem in it's structure, clift palate, hight of it.

=) lips :- how they work, shape, posture (open or close), mobility.

=) tonge :- structure and function of it, tonge tie,

=) tonsils :- size, color, structure

=) Velum :- Nasalization, size, hight, closure of the expiration

* Standardised tests :- give me no. that we analyis to know the nature of the disorders.

*(1) Criterion - Refrenced test :- detailed tests بيعطيني معلومات دقيقة
and give accurate data based on specific criteria ⇐ بناءً على جوانب محددة

*(2) Norm - Refrenced tests :- Numbers بيعطيني أرقام وبيانات عامة مش دقيقة ومفصلة ⇐ ~~Standardized tests~~ مقارنة بينه وبين الأشخاص اللي بنفس الفئة العمرية

↳ ما بيعطيني الاشي بالعمق :- يعني بيعطيني جوانب معينة وعامة مثال :- بحكيلي في مشكلة في توليد الكلمات ⇐ disorder مع بس ما بحكيلي المشكلة بتعريف الأفعال أو بالجمع والمفرد أو بالمذكر والمؤنث .....

⇐ بعد هاد الاختبار، بعمل فحوصات ثانية عشان أعرف المشكلة بعمق. ⇐ إلي Criterion-Refrenced tests.

* Norm-Refrenced tests ~~Standardized~~ and Criterion-Refrenced are Formal tests.

* We (in Palestine) ~~use~~ don't use Formal tests while some places around the world reached & and made formal tests that they use.

* Dynamic Assess. : بعد فترة من العلاج عشان اقيس مدى تطور ناخ الحالة ونقيس ونعرف الخطوات الجاية من العلاج.

* Behaviour modification :- هي خلل واضطرابات بـ behaviours ومستويات disorders مختلفة منها. فاحنا بنستهدفها وبنعملها Modification ليوصل لمستوى يمكنوا أنه يعمل effictive comm.

* we must reach findings and analysis it.

* closing interview :- عبارة عن لقاء من خلاله نعطي Report للـ Findings والـ diagnosis وكل شي له علاقة بالـ Client.

* ~~Audio~~ spoken Report :- عن الطريق التكلم مع الـ Client أو عيلته في حال كان غير قادر على الكلام وبحكيلهم بالتفصيل عن المشكلة والعلاج وما إلى ذلك.

* written Report :- تقرير احنا بنكتبوا وبيشمل فيه جميع النقاط و ~~Procedures~~ الـ Procedures المتخذة في الـ evaluation. وتلخيص لكل هاي الأمور، تلخيص الـ case history والـ findings والجوانب الي فحصتها والـ diagnostic statment والـ Prognosis، وآخر اشي بكون الـ Recomondation.

* Recomondation :- التوصيات الي أنا بقترحها نتيجة عن الـ assessment ككل.

* cowld be :-

① Direct Recomendation :- Related to the communication disorder that the client have. (goals and ~~targets~~ objectives that I want to target)

② other Recomendation :- If I want to Direct the client to another specialists.....

we work in multidisciplinary team work
بنشتغل ضمن طاقم متعدد التخصصات، لأنه الشخص مثلاً بكون عنده مشكلة معينة بتأدي إلى وجود وبعمل مشكلات ثانية بتعامل معها أشخاص آخرين.

* Intervention:- therapy & treatments التدخل ⇒ behavioral modification نوعو
أي
* دوره بـ behavioural modification عن Stimulus ومعاها يتفرع Response عشان أعدل

* لازم أكون عندي المعرفة المهنية والنظرية عشان أعرف أعدل على الإجراءات اللي بدي أعدل منها behavriol mod.

we don't only
put a goal and target it] لا we have also other goals like:-

* Generalization:-
يستطيع الـ Client يعمل اللي تعلمو بالعلاج في enviromantal events ← diffrent

* modification should be automatic
لازم نوصل الـ Client أنو يستخدم السلوكيات المختلفة بدون تفكير بشكل تلقائي
فبوصل إنو يكون الـ aquired السلوكيات ← should be automatic.

* self-Monitoring.
يعرف متى أخطأ ويحد منها ويرفع الـ awareness عندو فبنوصل منها لـ Generalization.

* minimum amount of time
← استخدم أكبر قدر من الـ modification بفترة زمنية محددة والوصول إلى أعلى نتيجة

* course should be sensitive to the personal and cultural characteristics of the client.

⇒ * هاي من الأهداف اللي بنوصلها. بحكي الشاكل (لازم نوصلها)

* the target differ depend on the disorder
↳ غير اللي بـ... لازم يكونوا الأهم

* Target select.

Developmental approach (Age Appropriateness) :-

* أشياء احنا بنعرفها بتصير في عمر معين.
* بعمر السنة الأطفال بيكتسبوا كلمتهم الأولى ← اشي عالمي معروف.
* بيحطوا إذا في عندي أخطاء وبدي أعرف أنه لازم اشتغل عليه أول.
مثلاً حسب المعايير الطفل بيحكي k قبل r.

* Non-Developmental approach.

* بتتجاهل معايير التطور وبتطلع على أشياء ثانية

we know this inf. by assess.

* Client need:- what the client need to make
* stimubility:- ex:- more stimulable to make r more than k so I work on r before k.
* which sound or things is more stimulable in the client.

* Ease of mastery:-

يستهدي

* Baseline Data:- Elicit the target behavior multiple times in multiple conditions to see the accuracy and depend on it we determine starting point and the client's progress and success.

* Baseline Data:-

Baseline objectives:- we look at 4 things to build the target

ABCD:-

① Actor:- the client who is expected to do the behavior

② Behavior:- * what should I target.
* observable and measurable behavior

ex:- my target:- mohamed (actor) will be able to produce r sound (Behavior) in isolation (condition) with 80% accuracy (Degree => 8 out of 10 times).

③ Condition:- context or condition of the behavior

④ Degree:- degree or percentage of success.

* ننظر لـ :- مين بدو يعمل؟ شو بدو يعمل؟ كيف بدو يعمل؟ ونسبة النجاح المتوقعة والمطلوب الوصول لها؟

* Direct teaching:- behavior modification

* we should be an effective model for the client.

⇒ Stimulus any behavior you want to modify.

⇓ from SLP

* every Stimulus should have Response ⇒ from client

* if I don't have response, we do [Reinforcment] ⇒ تعزيزات

⇓ from SLP تشجيع

* Incidental teaching:- تتعلم الطفل بشكل طبيعي كل شيء من حوله

الصفة من البيئة التي حوله ⇐ اذا بنعمل زي صاحب البيئة عشان أخلي بشكل طبيعي الـ client

* Low structured and client lead approach.

* the Clinician has to manipulate the environment so that communication should occure naturally.