

*PSYCHIATRIC  
EVALUATION IN CLINICAL  
NEURO -OTOLOGICAL  
PRACTICE*

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# *Relevance of Psychiatry in Neuro-Otology*

- > ½ of all patients with chronic dizziness are diagnosed with anxiety & about 1/3 of them have primary (psychogenic) anxiety
- **Vertigo as a symptom:** anxiety disorder, depression, somatoform disorder, psychosis, PTSD, Dementia
- **Psychiatric disorders + Organic vertigo** – high comorbidity
- **Vertigo as a defined syndrome:** Panic disorder, phobic postural vertigo (which is controversial)
- **Psychological overlay of organic vertigo syndromes** in predisposed personalities
- **Medications associated with Dizziness:** Anti dementia agents, ADHD medicines, antiepileptics, Lithium, Benzodiazepine

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*(Staab, 2007; Shah & Mukherjee, 2012; Muncie et al, 2017)*

# What is Psychiatry?

- Morbid psychological experiences/ disordered mind

➤ Emotions



➤ behaviours



➤ thoughts



➤ perceptions



# *How does it differ from other branches of medicine?*

- Unlike different parts of human body-intangible, effervescent & indefinable



- Unlike other medical practitioners cannot resort to inspection, palpation, percussion and auscultation
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# *How does it differ from other branches of medicine?*

Diagnosis of disorders in Psychiatry depends mainly on “talking” to clients instead of examination & investigations



Affected by social, cultural norms of “normality” –varies across countries & time

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# *Psychiatric Interview*

- ❑ **Goal:** To establish a psychiatric diagnosis based on medical model - symptom-oriented, open-ended questions followed by closed-ended, non leading questions centring on the disorder
  - ❑ Cross-sectional interview consists of 4 components, which interviewer must continuously monitor & propel throughout -
    - **Rapport:** Good doctor–patient relationship is a prerequisite for effective interview
    - **Technique:** approaches used by interviewer to keep interview “on track”
    - **History & Mental State Examination**
    - **Diagnostic formulation**
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# *Psychogenic vertigo: Diagnostic criteria*

- Subjectively perceived recurrent or persisting vertigo or dizziness, disturbances of stance and gait, or spatial orientation
  - Normal findings on neurotological examinations: signs of an earlier vestibular disorder already compensated for were categorized as non pathological
  - Failure to fulfill diagnostic criteria of organic vestibular vertigo syndromes
  - There are positive criteria according to the DSM 5 & the ICD-10, thus confirming presence of a somatoform disorder
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# *History*

- Identifying data
- Chief complaint
- Informants: List of all informants, their reliability & level of cooperation

Previous medical records, if available

- History of present illness
  - Psychiatric disorders in remission
  - Medical history
  - Early developmental & social history
  - Premorbid personality
  - Family history
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# *History*



- **When to suspect Psychiatric overlay?**
- Lightheadedness, fractional or poorly described symptoms of vertigo, faintness or disequilibrium
- Symptom decreases with exercise or distractions
- Feeling of queasiness at heights, crowds, on seeing busy/hectic patterns (on walls, visual display units)
- Exaggerated acoustic startle response & autonomic signs
- Impaired everyday activities (shopping, working in a crowded place) but not others like bicycle, sports)

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**(Szirmai, 2011; Shah & Mukherjee, 2012)**

# *History*

## When to suspect Cognitive impairment?

- **Age** : > 60 years
- **Genetic/family history**
- **Vascular** – Hypertension, hyperlipidaemia
- **Lifestyle** – smoking, lack of physical exercise



# *What should you ask if cognitive impairment is suspected?*



Ask patient & caregiver –

- Does he/ she forget recent events, conversations, actions
  - Does he /she forget names of familiar people, items
  - Does he/ she have any difficulty in performing his / her day to day activities
  - Does he/she need help in activities of daily living
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# *Physical Examination*



## **When to suspect Psychiatric overlay?**

- Momentary fluctuations of stance & gait, often in response to suggestion
- Excessive slowness or hesitation of locomotion incompatible with neurological disease
- “Psychogenic” Romberg test - build-up of sway amplitudes after silent latency or with improvement by distraction
- “Walking on ice pattern” -small cautious steps with fixed ankle joints
- Sudden buckling of the knees, usually without falls

***(Brandt et al, 1994)***

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# *Physical Examination*

## **When to suspect Psychiatric overlay?**

- **Hyperventilation test:** precipitate vertigo in all patients but nystagmus is absent in purely psychiatric etiology though subjective sensation of dizziness is reported
- **'Sharpened' Romberg' test:** Standing heel to toe with eyes closed with arms folded across the chest for 6 seconds - if an individual can perform this test - almost excludes organic neurologic disease

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*(Shah & Mukherjee, 2012; Hain, 2016)*

# *Mental state examination*

- General appearance, attitude and behaviour
  - Psychomotor activity
  - Speech
  - Affect
  - Thought
  - Perception
  - Cognitive functions
  - Judgment
  - Insight
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# *Cognitive function assessment*

- **Orientation:**

Time, place, person

- **Attention & Concentration:**

*Digit forward: (5-7 –N)*

*Digit backward (3-5-N)*

*Serial subtraction*

- **Memory:**

- *Immediate* – registration of 3 unrelated words, recall within seconds
- *Recent* – (ability to learn new & recall after an interval of minutes, hours or day) Recall of above 3 word after 3minutes, what he/she has eaten in the past 24hrs
- *Remote* - facts or events that occurred years previously

# *Cognitive function assessment*

- **Intellectual functioning**

- *General fund of knowledge*

- *Calculation*

- *Comprehension*

- **Abstract thinking**

- *Proverb testing*

- *Similarities*

- **Judgment**

- *Social*

- *Test*

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# *Laboratory tests*

- Vestibular testing in panic disorder, acrophobia or agoraphobia may yield results indicative of organic dysfunction
- Provocative caloric testing- atypical or bizarre responses
- Testing for spatial orientation & attention

*(Shah & Mukherjee, 2012)*

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# *Dizziness: Assessment*

- **Dizziness Handicap Inventory** - level of impairment - incorporate measurement of emotional function & physical impact of dizziness on person's life

**Instructions: The purpose of this scale is to identify difficulties that you may be experiencing because of your dizziness. Please check “always”, or “no” or “sometimes” to each question. Answer each question only as it pertains to your dizziness problem.**

	<b>Questions</b>	<b>Always</b>	<b>Sometimes</b>	<b>No</b>
<b>P1</b>	Does looking up increase your problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E2</b>	Because of your problem, do you feel frustrated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F3</b>	Because of your problem, do you restrict your travel for business or pleasure?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P4</b>	Does walking down the aisle of a supermarket increase your problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E9</b>	Because of your problem, are you afraid to leave your home without having someone accompany you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>E10</b>	Because of your problem, have you been embarrassed in front of others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>P11</b>	Do quick movements of your head increase your problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>F12</b>	Because of your problem, do you avoid heights?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# *Psychiatric Assessment*

## **Psychiatric scale: Screening**

- Depression: Patient Health Questionnaire- 2 (PHQ 2)

Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not At all	Several Days	More Than Half the Days	Nearly Every Day
1. Little interest or pleasure in doing things	0	1	2	3
.....				
2. Feeling down, depressed or hopeless	0	1	2	3

# Psychiatric Assessment

## Psychiatric scale: Diagnostic

### Patient Health Questionnaire- 9 (PHQ)

Over the past 2 weeks, how often have you been bothered by any of the following problems?

	Not At all	Several Days	More Than Half the Days	Nearly Every Day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed or hopeless	0	1	2	3
3. Trouble falling asleep, staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself - or that you're a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or, the opposite - being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

# Psychiatric Assessment

## Psychiatric scale: Screening

- Hospital Anxiety and Depression scale (HAD)

Tick the box beside the reply that is closest to how you have been feeling in the past week.  
Don't take too long over you replies: your immediate is best.

D	A		D	A	
		<b>I feel tense or 'wound up':</b>			<b>I feel as if I am slowed down:</b>
	3	Most of the time	3		Nearly all the time
	2	A lot of the time	2		Very often
	1	From time to time, occasionally	1		Sometimes
	0	Not at all	0		Not at all
		<b>I still enjoy the things I used to enjoy:</b>			<b>I get a sort of frightened feeling like 'butterflies' in the stomach:</b>
0		Definitely as much		0	Not at all
1		Not quite so much		1	Occasionally
2		Only a little		2	Quite Often
3		Hardly at all		3	Very Often

# *Screening for cognitive dysfunction*

- **Dementia Assessment by Rapid Test (DART) (Swati et al, 2015)**
  - Administered to patients having subjective cognitive issues or memory problems & probable case of MCI/Dementia
  - (i) Repeating dissimilar words: The patient has to repeat 3 common words (elephant, bottle & paper)
  - (ii) Naming: The patient is asked to name as many vegetable names within 1 minute
  - (iii) Recall dissimilar words: Tested by asking subject to recall 3 words spoken earlier
  - (iv) Clock Drawing: Tested by asking subject to draw a clock showing time 10 minutes past 8 (If patient is not able to draw; then a toy clock with needles is used, where the patient has to rotate the needles and show the prescribed time)
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# *Screening for cognitive dysfunction*

- **Dementia Assessment by Rapid Test (DART)** Scoring done in terms of numbers of errors committed
- Score ranges is 0-4
- Higher score  $\geq 2$  - more likelihood of cognitive impairment
- Validated against 150 (88=patients and 62=control) right-handed, consenting subjects between 55-84 yrs of age with minimum elementary education
- DART scores discriminated between dementia cases & controls clearly
- Validated against gold standard of MMSE, with sensitivity of 95.5%, specificity of 60.0%; true positive predictive value of 70.2%, true negative predictive value of 93.0%

*(Swati et al, 2015)*

# *Conclusion*

- Psychiatric interview not different from any medical interview
  - For successful diagnosis knowledge about diagnostic criteria required
  - Interview itself helps to establish therapeutic relationship – paving the path for successful management
  - May need to see patient more than once to generate sufficient trust & psychological understanding
  - Referral to Psychiatry will be acceptable if patient is not made to feel that the doctor is undermining his/ her distress & indicating that he/ she is generating symptoms himself / herself
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**THANK YOU**



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