



## **History and Mental Status Examination in Primary Care in Saudi Arabia: A Review**

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### **Authors' contributions**

*This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.*

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### **ABSTRACT**

The mental state assessment is an important tool for doctors when determining psychiatric diagnosis. Physicians can better identify and differentiate psychiatric diseases if they are familiar with the components of the examination. A thorough medical history entails a more in-depth investigation into the patient's medical problems, including all diseases and illnesses that are currently being treated, as well as those that have left any lasting consequences on the patient's

health. A major source of worry is the patient's health literacy, as well as how questions to acquire histories are asked in such a way that the patient understands and can respond appropriately. Medical record practices have a long history of criticism, despite their usefulness. Records that are untimed or outdated, use imprecise language or are illegible, lack a logical structure, are poorly synthesized, are difficult to access and prone to loss, lack information relevant to clinical treatment goals, or are plain incorrect are all common concerns. In this review we will be looking at approaches for mental and history examination, as well as the importance of such reports

*Keywords: Primary care; mental status; mental examination; psychology; history.*

## 1. INTRODUCTION

When it comes to treating a patient, any information acquired might be vital in guiding and directing care. Many first contacts with patients will contain a medical history question, although later visits may merely involve a review of the medical history and potentially an update with any changes. Obtaining a medical history can uncover relevant chronic illnesses and other prior disease states for which the patient may or may not be receiving treatment but which may have had long-term health consequences. Differential diagnoses may also be influenced by medical history [1]. A medical history entails an investigation of the patient's medical history, past surgical history, family medical history, social history, allergies, and drugs that the patient is taking or has recently ceased taking [1].

The mental state assessment is an important tool for doctors when determining psychiatric diagnosis or referring a case to psychiatric. Primary care physicians can better identify and differentiate some psychiatric diseases if they are familiar with the components of the examination. The mental state assessment in primary care incorporates the patient's previous medical history as well as data collected by the physician throughout the patient contact. The incorporation of crucial components of the mental status evaluation into a typical primary care visit, as well as deciding whether a more extensive examination or referral is required, are major problems [2].

The mental status examination in primary care is a systematic evaluation of the patient's behavioral and cognitive abilities. Descriptions of the patient's appearance and general behavior, level of consciousness and alertness, motor and linguistic activity, mood and affect, thought and perception, attitude and insight, the examiner's reaction, and higher cognitive abilities are all included. The therapeutically important cognitive skills are attentiveness, language, memory, constructional ability, and abstract reasoning [3].

Each primary care physician organizes the mental status examination differently, but the major areas of focus are the same. The mental status examination in primary care can be divided into broad areas for the purposes of this activity, such as appearance, behaviour, motor activity, speech, mood, affect, thought process, thought content, perceptual disturbances, cognition, insight, and judgement. Cognition can be divided into several cognitive domains based on the regions that the practitioner deems important to evaluate. The definition, the right method of evaluation, and how that information is used in the diagnosis and monitoring of mental illness are all covered in the sections below [4].

There is currently a growing consensus about the need for a minimal structure for greater primary care reliability, as evidenced by a substantial bibliography on how to increase examiners' agreement about symptoms [5,6,7]. Because PE and MSE are logically associated, mental health practitioners frequently employ MSE as a substitute for PE from normal clinical examination and as a trustworthy way for acquiring objective data [8,9]. Clinical interview/anamnesis, on the other hand, comes before and directs PE procedures and laboratory searches, but it is at the heart of the mental/psychic examination process and is employed in the majority of instances [10,11,12,13].

## 2. MENTAL EXAMINATION TECHNIQUE

Pinel, one of the founding fathers of modern psychiatry, offered some guidance to his peers in his *Treatise on Insanity*, published in 1801: Detecting the genuine nature of mental illness in a given case and pronouncing an infallible prognosis is often a delicate endeavour that necessitates the combined efforts of great discernment, wide knowledge, and immaculate integrity [3].

In many ways, the mental status examination lends itself less readily to a methodical and

planned approach than other aspects of the patient's assessment. On the one hand, because mental status testing can be frightening for patients and demands a lot of cooperation from them, it's best to save it for the end of the overall evaluation, when the patient is most relaxed and the examiner and the patient have established some level of bond [4,6]. On the other hand, the patient's mental state influences the accuracy and sensitivity of the entire medical history, and the physician wishes he or she could perform a mental status examination as a prelude to the rest of the history so that the assessment could be used as a template against which the rest of the history could be measured. The successful clinician must create a style in which much of the mental status evaluation is conducted through unstructured observations made during routine history and physical examinations [3,9,8]. The way the patient describes the current illness's history will disclose a lot about the patient's general appearance and behavior, alertness, speech, activity, affect, and attitude. Imposing some structure on these observations and bringing them from the level of subliminal perceptions to clinically meaningful descriptions of behavior is thus a major strategy in mental status assessment [3,5].

### 3. GENERAL ASSESSMENT OF APPEARANCE AND BEHAVIOR

The examiner gets an overall impression of the patient based on these criteria. Physical appearance (apparent vs. declared age), grooming (immaculate/unkept), clothes (subdued/riotous), stance (erect/kyphotic), and eye contact (direct/furtive) are all observations that should be made. Observation of behaviour can easily reveal certain specific syndromes, such as unilateral spatial neglect and frontal lobe syndrome disinhibited behaviour.

#### - **Speech and Motor Activity**

Listening to the patient's spontaneous speech as he or she narrates replies to open-ended queries might provide a wealth of information. The hypophonia of Parkinson's disease, the halting speech of a patient with word-finding difficulty, or the fast and pressured speaking of a manic or amphetamine-intoxicated patient are all examples of output or articulation problems. Overall motor activity, including any tics or peculiar mannerisms, should be noted. Slowness and lack of spontaneity in movement are symptoms of subcortical

dementia or depression, while akathisia (motor restlessness) is a symptom of an extrapyramidal illness caused by phenothiazine use [3].

It's crucial to pay attention to a patient's posture since it can reveal underlying concerns. Sustained posturing could be a sign of catatonia, a sort of psychomotor immobility/stupor/inflexibility that is common in psychotic diseases. Catatonia is typically overlooked by practitioners who are unfamiliar with the disorder, but it is important to distinguish since it requires a different treatment than the underlying psychosis. If the patient has akathisia, which is a restless want to move or a difficulty to keep still, they may have hyperactivity/impulsivity, which is common in people with attention deficit hyperactivity disorder. A patient with akathisia could also be suffering from an antipsychotic side effect. [4]

Rigidity, tremors, and tics such as teeth grinding, lip-smacking, or tongue protrusions are other features of movement that may indicate extrapyramidal side effects (EPS) from antipsychotics. Acute dystonic response is defined as severe abrupt rigidity following antipsychotic treatment. Although uncommon, if the laryngeal muscles are involved, this can be life-threatening. As a result, the practitioner must keep an eye on even the tiniest reactions and treat them before they become more serious. Tardive dyskinesia is a neurological disorder that develops as a result of long-term antipsychotic use and is characterized by extrapyramidal side effects. The Abnormal Involuntary Movement Scale can be used to track these symptoms and their severity in further detail (AIMS) [4].

#### - **Affect and Mood**

Affect is the patient's immediate manifestation of emotion, whereas mood relates to the patient's personality's longer-term emotional makeup. Patients have a wide spectrum of affect, which can be classified as broad, confined, labile, or flat. When there is a misalignment between what the patient is experiencing or describing and the emotion he is displaying

at the same time, affect is inappropriate (e.g., laughing when relating the recent death of a loved one). Dysphoric (depression, anxiety, guilt), euthymic (normal), or euphoric affect and mood might be defined (implying a pathologically elevated sense of well-being) [3].

A patient with an inappropriately elated attitude is one who smiles and laughs after being taken to the hospital for involuntary assessment. Another descriptor physicians might use to describe affect is whether it is consistent or inconsistent with the patient's stated mood. If a patient claims they are in a good mood and smiles, their affect is positive and hence congruent. If same patient, on the other hand, answered "wonderful" while crying, their effect would be sad and incongruent [4].

- **Perception and Thought**

The inability to effectively comprehend information is one of the characteristics of psychotic thinking. As a result, how the patient sees and responds to stimuli is an important part of the psychiatric evaluation. Does the patient have reasonable concerns, or have they become irrational fears? Is the patient's reaction to genuine events exaggerated, or does the patient's belief or conduct have no discernible basis in reality? [3].

- **Insight and Attitude**

The emotional tone expressed by the patient toward the examiner, other people, or his disease is referred to as his attitude. Hostility, rage, helplessness, pessimism, self-centeredness, or inactivity are all possibilities. Similarly, the patient's attitude about the condition is a critical factor. Is the patient a complainer who refuses to accept help? Is the patient's ailment classified as psychiatric or non-psychiatric? Is the patient hoping for a better outcome, or is he or she content to suffer in silence? The patient's attitude typically shifts during the interview, and it's crucial to keep track of any shifts [3].

- **Cognition**

Alertness, orientation, attention/  
concentration, memory, and abstract

reasoning are the most common aspects of cognition assessed during a mental status test. If the practitioner discovers symptoms of a possible neurocognitive disorder while assessing cognition or any other aspect of the mental status examination, additional evaluation tools such as the Mini-Mental State Examination (MMSE), Montreal Cognitive Assessment (MOCA), or Mini-Cog can be used to conduct a more thorough screening [5,14,15].

- **Reaction of the Examiner to the Patient**

The sensations a patient arouses in the examination are frequently a source of extremely helpful information. These data can be subtle and readily overlooked when the examiner, in an effort to stay objective, fails to identify how he or she is reacting to the patient. The examiner's increasing distress could be the first sign that he or she is dealing with a depressed patient. A feeling of being off-balance and slightly out of touch with the discourse may be an early indication that one is dealing with a schizophrenia patient, whereas frustration may be the response to the help-rejecting complainer [3].

#### 4. MEDICAL HISTORY

A thorough medical history entails a more in-depth investigation into the patient's medical problems, including all diseases and illnesses that are currently being treated, as well as those that have left any lasting consequences on the patient's health. A surgical history that includes all invasive operations performed on the patient. Another part of the patient's medical history is his or her family history, which may reveal hereditary predisposition to disease. Social history is a broad category of a patient's medical history that may include smoking or other tobacco usage, alcohol and drug use, and other aspects of the patient's health such as spiritual, mental, relationship status, occupation, hobbies, and sexual activity or relevant sexual habits. If there is a worry for health danger or a link to the acute disease condition, these may demand further investigation [1].

A major source of worry is the patient's health literacy, as well as how questions to acquire histories are asked in such a way that the patient understands and can respond appropriately.

When questioned about "medical difficulties," patients frequently do not mention their chronic illnesses, especially in acute treatment settings where the patient may not comprehend the significance or relevance of the chronic disease. In some cases, a question may need to be asked numerous times in order to obtain the relevant information [1,16-18].

## 5. COMMUNICATION SKILLS

The physician-patient connection is built on the capacity to listen well and communicate openly and empathically with the patient. A physician's ability to communicate successfully with patients and peers is critical to his or her success. Communication from the physician should be impartial, nonjudgmental, and empathic. Physicians are generally better at gathering medical data than they are at comprehending how that data impacts patients. Both verbal and nonverbal exchanges are part of communication. Even when disclosing bad news, a physician with good communication skills should be able to make the patient happy that she or he saw the physician by creating a calm atmosphere, relaxed setting, and ample time, but even then, a physician with good communication skills should be able to make the patient happy that she or he saw the physician. This can be accomplished by always telling the truth while also putting a positive spin on frightening material. When the doctor is being realistic, he or she might state things like the cancer was detected early, reassurance about a likely favorable result, or a new and improved therapy [19].

## 6. DATA ANALYSIS AND DISCUSSION

In a study: A total of sixteen textbooks were chosen from a 49-year period. In the MSE, the major trend was descriptive psychopathology with phenomenological orientation. The use of concepts taken from several traditions, most of which lacked uniform vocabulary, implied some author disagreement. Although there were clear recommendations for patient observation and how to acquire objective data, MSE standardization efforts were lacking. The major MSE record strategy was a detailed description of mental function anomalies, with no agreement on how to summarize and record this data. Mental strata were categorized into "mental functions" in an assessment summary, and MSE subgroups were common. Consciousness, perception, thinking, memory, attention, direction,

and volition were all considered by the authors [5].

The basic goal of medical records is to facilitate communication among healthcare professionals in order to provide seamless patient care. They do, however, serve as a vital collection of management, financial, and statistical data, as well as a source of evidence in the event of a lawsuit and a potential teaching and research resource. Medical record practices have a long history of criticism, despite their usefulness. Records that are untimed or outdated, use imprecise language or are illegible, lack a logical structure, are poorly synthesized, are difficult to access and prone to loss, lack information relevant to clinical treatment goals, or are plain incorrect are all common concerns [20-28].

## 7. CONCLUSION

History and mental status examination is integral part of the healthcare process in primary care, communication skills and examiner experience plays a critical role in the outcome of the exam, there for the health care must have sufficient training in this matter as they do in other areas. There's more than one approach that can be used in primary care, the need for more standardized method, better trained primary care physicians can improve the outcome of mental and history examination in primary care.

## CONSENT

It is not applicable.

## ETHICAL APPROVAL

It is not applicable.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Nichol JR, Sundjaja JH, Nelson G. Medical History. [Updated 2020 Sep 7]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021. Available: <https://www.ncbi.nlm.nih.gov/books/NBK534249/>
2. Snyderman D, Rovner B. Mental status exam in primary care: a review. *Am Fam Physician*. 2009;80(8):809-14. PMID: 19835342.

3. Martin DC. The Mental Status Examination. In: Walker HK, Hall WD, Hurst JW, editors. *Clinical Methods: The History, Physical, and Laboratory Examinations*. 3rd edition. Boston: Butterworths; 1990. Chapter 207. Available: <https://www.ncbi.nlm.nih.gov/books/NBK320/>
4. Voss RM, M Das J. Mental Status Examination. [Updated 2020 Oct 13]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021. Available: <https://www.ncbi.nlm.nih.gov/books/NBK546682/>
5. Rocha Neto HG, Estellita-Lins CE, Lessa JLM, Cavalcanti MT. Mental State Examination and Its Procedures-Narrative Review of Brazilian Descriptive Psychopathology. *Front Psychiatry*. 2019;10:77. doi: 10.3389/fpsyt.2019.00077. PMID: 30890969; PMCID: PMC6413621.
6. Foucault M, Gros F, Ewald F, Fontana A. *Le Gouvernement de Soi et Des Autres: Cours au Collège de France*, Paris: Gallimard; 2003;1973-1974..
7. Zuardi AW, Loureiro SR. *Semiologiapsiquiátrica*. Med Ribeirão Preto. 1996;29:44–53.
8. Taggart C, O'Grady J, Stevenson M, Hand E, Mc Clelland R, Kelly C. Accuracy of diagnosis at routine psychiatric assessment in patients presenting to an accident and emergency department. *Gen Hosp Psychiatry*. 2006;28:330–5. 10.1016/j.genhosppsy.2006.05.002
9. Sartorius N, Janca A. Psychiatric assessment instruments developed by the World Health Organization. *Soc Psychiatry Psychiatr Epidemiol*. 1996;31:55–69. 10.1007/BF00801901
10. Helzer JE. The use of a structured diagnostic interview for routine psychiatric evaluations. *J NervMent Dis*. 1981;169:45–9. 10.1097/00005053-198101000-00006
11. Chen Y, Li H, Li Y, Xie D, Wang Z, Yang F, et al. Resemblance of symptoms for major depression assessed at interview versus from hospital record review. *PLoS ONE*. 2012; 7:e28734. 10.1371/journal.pone.0028734
12. Martin DC. The mental status examination. In: Walker HK, Hall WD, Hurst JW. editors. *Clinical Methods: The History, Physical, and Laboratory Examinations*. Boston, MA: Butterworths; 1990;1087.
13. Aboraya A, First MB. Point/counterpoint: the reliability of psychiatric diagnosis. *Psychiatry*. 2007;4:22–5.
14. Grossman M, Irwin DJ. The Mental Status Examination in Patients With Suspected Dementia. *Continuum (Minneapolis)*. 2016;22(2 Dementia):385-403.
15. Norris D, Clark MS, Shipley S. The Mental Status Examination. *Am Fam Physician*. 2016; 94(8):635-641.
16. Litzau M, Turner J, Pettit K, Morgan Z, Cooper D. Obtaining History with a Language Barrier in the Emergency Department: Perhaps not a Barrier After All. *West J Emerg Med*. 2018; 19(6):934-937.
17. Dunne C, Dunsmore AWJ, Power J, Dubrowski A. Emergency Department Presentation of a Patient with Altered Mental Status: A Simulation Case for Training Residents and Clinical Clerks. *Cureus*. 2018;10(5):e2578.
18. Toney-Butler TJ, Unison-Pace WJ. StatPearls [Internet]. StatPearls Publishing; Treasure Island (FL): Nursing Admission Assessment and Examination; 2020.
19. Davis JL, Murray JF. History and Physical Examination. Murray and Nadel's Textbook of Respiratory Medicine. 2016:263–277.e2. doi: 10.1016/B978-1-4557-3383-5.00016-6. Epub 2015 Apr 3. PMCID: PMC7152492.
20. Lobo SE, Rucker J, Kerr M, Gallo F, Constable G, Hotopf M, Stewart R, Broadbent M, Baggaley M, Lovestone S, McGuffin P, Amarasinghe M, Newman S, Schumann G, Brittain PJ. A comparison of mental state examination documentation by junior clinicians in electronic health records before and after the introduction of a semi-structured assessment template (OPCRIT+). *Int J Med Inform*. 2015;84(9):675-82. doi: 10.1016/j.ijmedinf.2015.05.001. Epub 2015 May 19. PMID: 26033569; PMCID: PMC4526540.
21. Abdelrahman W., Abdelmageed A. Medical record keeping: clarity, accuracy, and timeliness are essential. *BMJ Careers*; 2014.
22. Harrop M., Amegavie L. Developing a paediatric asthma review pro forma. *Nurs Stand*. 2005; 19:33–40.
23. Oladipo A, Narang L, Sathiyathan S, Hakeem-Habeeb Y, Mustaq V. A

- prospective audit of the quality of documentation of gynaecological operations. *J. Obstet. Gynaecol.* 2011;31:510–513. (The Journal of the Institute of Obstetrics and Gynaecology)
24. Pullen I, Loudon J. Improving standards in clinical record keeping. *Adv. Psychiatr. Treat.* 2006; 12:280–286.
25. Reiser S.J. The clinical record in medicine. Part 2: Reforming content and purpose. *Ann. Intern. Med.* 1991;114:980–985.
26. Burnum JF. The misinformation era: the fall of the medical record. *Ann. Intern. Med.* 1989; 110:482–484.
27. Campling EA., Devlin H.B., Hoile R.W., Lunn J.N. 1991/1992. The Report of the National Confidential Enquiry Into Perioperative Deaths; 1992.
28. Audit Commission. Audit Commission; London: Setting the Record Straight: A Study of Hospital Medical Records; 1995.

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