ISSN: 2832-7705

Clinical Audit Article

International Journal of Clinical and Medical Education Research

A Clinical Audit of Mental State Examination Documentation Among Psychiatric Residents in a Tertiary Care Hospital

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Submitted: 2023, Sep 08; **Accepted**: 2023, Oct 13; **Published**: 2023, Oct 26

Citation: Khan, A. M., Rehman, A., Jat, M. I. (2023). A Clinical Audit of Mental State Examination Documentation Among Psychiatric Residents in a Tertiary Care Hospital. *Int J Clin Med Edu Res, 2*(10), 284-288.

Abstract

Introduction: *Modern psychiatry uses Mental State Examination (MSE) as a tool for collecting data and assisting a psychiatrist in developing patient's working psychiatric diagnosis. There are currently no national criteria on a definitive format of MSE, nor do the bulk of psychiatry training programs insist upon it. However, to ensure proper documentation of MSE results, following a structured format is needed, ensuring that all relevant components of the examination are covered. For this, we conducted this clinical audit regarding proper MSE documentation within the Psychiatry department of a tertiary care hospital.*

Methods: *The study was conducted in the Department of Psychiatry, Civil Hospital Karachi between 15-02-2023 till 15-04-2023 after approval by Head of Department. A standardized MSE format consisting of 11 parameters of psychiatric analysis was prepared according to British Medical Journal (BMJ) and Oxford University Press guidelines. The parameters incorporated appropriate date, time, and signature of the examining doctor, in addition to proper documentation of appearance, behavior, speech, mood and affect, suicidal and homicidal risk, thought process, perception, cognition (Orientation, attention, concentration, memory and abstract thinking), insight, judgement, and event notes/progress notes sections. The study was divided into two cycles. A retrospective analysis to detect the shortcomings of MSE documentation was done (sample size n=30), followed by a second cycle, in which a standardized MSE template was provided to all psychiatric residents to examine patients prospectively for the next 4 weeks. Data was analyzed using SPSS software to compare the improved changes in MSE documentation.*

Results: *The result showed that all 11 parameters were recorded correctly, however certain sub-parameters were recorded poorly. The least recorded parameters were date of examination (53.3%), Physical stigmata (43.3%), psychomotor retardation (16.7%), and signs of Extrapyramidal symptoms (10.0%), speech assessment (46.7%), suicidal risk (20.0%), and homicidal risk (13.3%), perception assessment [Illusion (16.7%), depersonalization (13.3%), derealization (16.7%) and memory assessment. Documentation of event notes/progress notes was also recorded poorly (33.3%)]. There was an overall improvement in the documentation pattern of all the 11 parameters of MSE during the second audit cycle. The parameters and sub-parameters with an improvement included physical stigmata (66.7%), psychomotor retardation (76.7%), signs of Extrapyramidal symptoms (83.3%), speech assessment (90.0%), suicidal risk (83.3 %%), homicidal risk (83.3%), perception assessment [Illusion (86.7%), depersonalization (86.7%), derealization (80.0%)] and memory assessment. Patient's name and registration number were perfectly recorded with a percentage of 100% in the first audit cycle, however it declined to 86.7% in the second cycle. There were also marginal improvements in documentation of date of examination and examining doctor's name.*

Conclusion: *The introduction of an MSE format and consultant supervision of records improved the standard of MSE recording as well as basic medico-legal requirements by psychiatric trainees.*

Keywords: Mental State Examination, Psychiatry, MSE, Clinical Audit.

1. Introduction

In current clinical medicine, a diagnosis is made via integrating symptoms from a clinical interview with signs from physical examinations, lab tests and imaging studies. Modern psychiatry uses Mental State Examination (MSE) as an equivalent for physical examination and a dependable tool for collecting data and assisting a psychiatrist in developing a working theory on a patient's psychiatric diagnosis [1]. MSE is a psychiatrist's initial assessment of a patient's mental state and potential degree of the illness. For accurate diagnosis and an initial treatment plan, the information obtained from the MSE is coupled at its best with a psychosocial history, a review of mental symptoms, and a medical evaluation. The written MSE with subsequent progress notes is a concise but comprehensive snapshot of changes that take place over the course of the disorder and treatment plan of the patient [2].

The MSE's symptomatology data also makes this section of the clinical record an important focus for research application. The format of MSE documentation consequently varies from clinician to clinician because there are currently no explicit international criteria on a definitive structure for MSE, nor do the bulk of psychiatry training programs insist upon it. However, there are some frequently used components, usually appearance, behavior, mood and affect, speech, thought process, thought content, perception, cognition, insight and event/progress notes [3].

Proper documentation of MSE serves multiple purposes, including facilitating learning, ensuring continuity of patient care, and fulfilling medico-legal requirements. Documenting MSE findings allows psychiatric residents to review and reflect on their assessments. By recording their observations, trainees can revisit their assessments and track their progress over time. It provides a valuable reference for future discussions, supervision, and further training [4].

To ensure proper documentation of MSE results, following a structured template or format is needed, ensuring that all relevant components of the examination are covered. We conducted this clinical audit regarding proper MSE documentation within the Psychiatry department of a tertiary care hospital in Karachi, Pakistan.

The purpose of this audit was to evaluate the documentation practices of psychiatric trainees in relation to MSE and ensure compliance with established standards.

2. Methods

2.1 Study Settings: The study was conducted in the department of Psychiatry, Dr. Ruth K.M Pfau Civil Hospital Karachi Pakistan from 15 February 2023 till 15th April 2023. The department has a 20-bed capacity with subdivisions in male ward, female ward, child psychiatric ward, substance abuse ward and occupational therapy ward, catering patients of diverse psychiatric disorders.

2.2 Standardized MSE Format: A thorough literature search revealed that the scope, heading, pattern, and format of MSE recording vary between British Medical Journal (BMJ) and Psychiatric mental status examination published by Oxford University Press [5, 6]. However, both these guidelines comply that a standardized MSE ought to incorporate appropriate date, time, and signature of the examining doctor, in addition to proper documentation of appearance, behavior, speech, mood and affect, suicidal and homicidal risk, thought process, perception, cognition (Orientation, attention, concentration, memory and abstract thinking), insight, judgement, and event notes/progress notes sections. The final standardized MSE format consisted of 11 parameters and can be seen in Figure 1.

2.3 The Audit Cycles: The audit was divided into two cycles. In the initial audit cycle, a retrospective review of thirty randomly selected in-patient cases notes and mental state examination (MSE) documentation was done. The MSE documentation was compared with standardized MSE documentation criteria. Data was collected using data collection google Performa. MSE components were classified as either correctly or incorrectly written when compared with the standard format. Components reported to be not written or documented were deemed incorrectly recorded.

In order to implement the changes, before commencing the second re-audit cycle, a standardized MSE template was provided to all psychiatric residents to examine patients prospectively for the next 4 weeks. The trainees were trained and focused to perform their MSE evaluation using the standard MSE template in order to embed improved changes between the initial and second re-audit cycles.

2.4 Statistical Analysis: Data was analyzed using SPSS software to compare the improved changes in MSE documentation. The changes were discussed in the monthly ward meeting with consultants, nurses and residents.

3. Results

In the first audit cycle, a total number of thirty MSEs (n=30) done by psychiatric trainees were included and evaluated against the standardized MSE format between a period of 1 month (March, 2023). Incomplete MSEs were excluded from the cycle. The result showed that all 11 parameters were recorded correctly, however certain sub-parameters were recorded poorly. The most frequently recorded parameters were appearance/behavior assessment [Gender (83.3%), built and body stature (90.0%), rapport (90.0%), eye contact (90.0%)], Mood assessment (93.3%), Delusions (86.7%), Orientation assessment (90.0%), Insight assessment (76.7%) and Judgment assessment (60.0%). The least recorded parameters were date of examination (53.3%), Physical stigmata (43.3%), abnormal movements/psychomotor retardation (16.7%), signs of Extrapyramidal symptoms (10.0%), speech assessment (46.7%), risk assessment [suicidal risk (20.0%), homicidal risk (13.3%)], perception assessment [Illusion (16.7%), depersonalization (13.3%), derealization (16.7%)] and memory assessment [short term memory (36.7%), long term memory (33.3%). Documentation of event notes/progress notes was also recorded poorly (33.3%)]. Further details can be seen in table-1.

Elements of documentation in Mental State Examination (MSE)	First audit cycle (n=30)	Second audit cycle after implementation of Standardized MSE format (n=30)
1) General Information:		
Patient's name and registration number.	30 (100%)	26 (86.7%)
Date of examination.	16 (53.3%)	28 (93.3%)
Examining doctor's name.	22 (73.3%)	25 (83.3%)
2) Appearance and behavior:		
Gender.	25 (83.3%)	28 (93.3%)
Built and body stature.	27 (90.0%)	26 (86.7%)
Distinguishing features/Physical stigmata.	13 (43.3%)	20 (66.7%)
Personal hygiene.	17 (56.6%)	25 (83.3%)
Behavior towards examiner.	13 (43.3%)	26 (86.7%)
Abnormal movements/ Psychomotor retardation.	5 (16.7%)	23 (76.7%)
Signs of Extrapyramidal symptoms (EPS).	3 (10.0%)	25 (83.3%)
Patient's rapport.	27 (90.0%)	27 (90.0%)
Eye contact.	27 (90.0%)	26 (86.7%)
Body Posture.	6 (20.0%)	25 (83.3%)
3) Speech Assessment:		
Rate of speech.	14 (46.7%)	27 (90.0%)
Flow/fluency of words.	16 (53.3%)	26 (86.7%)
Form of speech.	22 (73.3%)	24 (80.0%)
Volume of speech.	23 (76.7%)	25 (83.3%)
Tone of speech.	21 (70%)	23 (76.7%)
4) Mood and Affect Assessment:		
Patient's description of mood.	28 (93.3%)	26 (86.7%)
Comment of patient's mood verbal expression.	11 (36.6%)	27 (90.0%)
Affect of the patient.	23 (76.7%)	27 (90.0%)
Does the mood match the affect.	10 (33.3%)	25 (83.3%)
5) Risk Assessment:		
Self-harm/ suicide.	6 (20.0%)	25 (83.3%)
Harm to others/homicide.	4 (13.3%)	25 (83.3%)
6) Thought process Assessment:		
Though form.	15 (50.0%)	25 (83.3%)
Though content.	20 (66.7%)	25 (83.3%)
Delusions.	26 (86.7%)	28 (93.3%)
7) Perception Assessment:		
Hallucinations.	22 (73.3%)	28 (93.3%)
Illusions.	5 (16.7%)	26 (86.7%)
Depersonalization.	4 (13.3%)	26 (86.7%)
Derealization.	5 (16.7%)	24 (80.0%)
8) Cognition Assessment:		
Orientation.	27 (90.0%)	26 (86.7%)

Attention and concentration.	17 (56.7%)	24 (80.0%)
Short term memory.	11 (36.7%)	23 (76.7%)
Long term memory.	10 (33.3%)	26 (86.7%)
Abstract thinking.	19 (63.3%)	24 (80.0%)
9) Insight Assessment.	23 (76.7%)	25 (83.3%)
10) Judgment Assessment.	18 (60.0%)	26 (86.7%)
11) Event notes/Progress notes.	10 (33.3%)	24 (80.0%)

Table 1: 1st and 2nd Audit Cycle of Mental State Examination (MSE) Documentation.

During the second audit cycle during a course of another 1 month (April, 2023), we distributed the standardized MSE format checklist among the psychiatric trainees and also in the ward file section. There was an overall improvement in the documentation pattern of all the 11 parameters of MSE during the second audit cycle. The parameters and sub-parameters with an improvement included physical stigmata (66.7%), abnormal movements/ psychomotor retardation (76.7%), signs of Extrapyramidal symptoms (83.3%), speech assessment (90.0%), risk assessment [suicidal risk (83.3%%), homicidal risk (83.3%)], perception assessment [Illusion (86.7%), depersonalization (86.7%), derealization (80.0%)] and memory assessment [short term memory (76.7%), long term memory (86.7%)]. Documentation of event notes/progress notes also improved to (80.0%). Full results are displayed in table-1.

In the baseline audit, we also evaluated the bio-data and medico-legal/coronial documentation in MSE. Patient's name and registration number were perfectly recorded with a percentage of 100% in the first audit cycle, however it declined to 86.7% in the second cycle. There were also marginal improvements in documentation of date of examination and examining doctor's name. Further results can be seen in table-2.

	First audit cycle (n=30)	Second audit cycle after implementation of Standardized MSE format (n=30)
Patient's name and registration number.	30 (100%)	26 (86.7%)
Date of examination.	16 (53.3%)	28 (93.3%)
Examining doctor's name.	22 (73.3%)	25 (83.3%)

Table 2: Bio-data and medico-legal/coronial documentation.

4. Discussion

Effective postgraduate medical teaching does not solely revolve around imparting a vast amount of knowledge to the learner. It goes deeper into the details to ensure that learning is based on assisting the learner's progression from one level to another while allowing the learner at the same time to gradually evolve and make sense of the content independently. The purpose of this clinical audit was not only to analyze the MSE documentation but also help the residents to learn the format of carrying out MSE in a memorizing way. Moreover, talking about the patient care, a complete MSE is essential for determining our diagnosis and choosing the appropriate course of treatment. The field of psychiatry has evolved so much over the recent decades with modern investigations but a proper and complete MSE still holds its importance in patient management.

All psychiatry residents received education in the MSE recording standard throughout the length of this study. After the initial audit, it became clear that most residents were more focused on evaluating mood, risk, and perception assessments and paid little attention to the significance of other characteristics such patient appearance and behavior, speech, and cognition assessment. Copies of the standardized MSE template was distributed to the residents and were made available at the counter and library of the ward. After each week, they received feedback to help them improve their skills. However, a positive change was noticed after this in the second cycle.

This study is not only for those in the field of psychiatry, but also to other health care departments as maintaining accurate records is an essential component of medical practice. It is essential to meeting medical and regulatory criteria, providing quality patient care, and preserving the credibility of the healthcare system.

To improve the standard of psychiatric education, we advise using the audit results to modify training programs, curricula, and policies as needed. For quality enhancement, a national assessment of psychiatric training programs and MSE documentation are crucial.

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