DO PSYCHIATRISTS EXAMINE PATIENTS?

A quantitative approach to audit physical examination in psychiatric wards

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Our aim was to assess our practice of physical examination retrospectively from clinical notes against set local standards. The objectives were to find out the number of examinations attempted on admission, and to ascertain the thoroughness of the examinations by quantifying the assessment of each system (cardiovascular, central nervous system, etc).

We reviewed clinical notes of 29 patients in acute psychiatric wards. Physical examination was attempted on 23 out of 29 patients at the time of admission, giving us an attempt rate of 79%. The overall thoroughness of our sample, as derived by calculating the mean of the average scores for all systems, was 29%. The most comprehensively done system in our sample was the cardiovascular with a score of 55%. The locomotor system was the worst with a score of only 15%.

We think the method of ascertaining the thoroughness of physical examination, as used in this audit, can be used in other psychiatric wards and probably in other disciplines as well. We believe the method provides some objectivity to the assessment of thoroughness in physical examination audits.

INTRODUCTION

Increased mortality and morbidity associated with physical illnesses in psychiatric patients can be explained by various factors, eg, side effects of psychotropic medications, sedentary life style, poverty and low educational achievement resulting in unhealthy life styles and increased consumption of harmful substances such as cigarettes, alcohol and illicit drugs.

A review of 152 studies found that premature deaths are high due to all causes in psychiatric patients.⁽¹⁾ The Standardised Mortality Ratios (SMR) due to natural causes is also high, especially high for substance abuse, eating disorders and mental retardation, epilepsy and organic mental disorders. SMR in schizophrenia is estimated to be three times higher than the general population.⁽²⁾ The morbidity associated with physical illness is also quite high in psychiatry patients. A study in 1979 found that 43% of psychiatric outpatients suffered from one or more physical illness, half of which were unknown to the patient and referring physician.⁽³⁾ The study also demonstrated that in 20% of the physically ill, the undiagnosed somatic disorder was the sole cause of the psychiatric symptoms.

The necessity of a good neurological examination has been highlighted,⁽⁴⁾ yet usually it is poorly performed.^(5,6)

For these reasons routine physical examination of psychiatric inpatients on admission is essential, and auditing this aspect of care is desirable.

Most of the audits done so far have focussed on whether physical examination was done or not, and how quickly after an admission it was done.^(7,8) Some have reported thoroughness of physical examination into simple categories like complete, partial and poor.^(8,9) Our literature search revealed one study which quantified the thoroughness of physical examination by using a checklist of 43 items, but the findings were not calculated as percentages.⁽⁵⁾

Audit standards

- Physical examination should be attempted on every patient admitted to inpatient acute psychiatry units.
- If a doctor is not able to do an examination at the time of admission, the reason should be documented clearly in the patient's notes and attempts should be made to do it as soon as possible.

METHODOLOGY

We collected data from the three acute general psychiatric wards in South Cumbria. Each ward was using a different physical examination form. To maintain uniformity, we devised a template to collect data by combining essential features of each form (see appendix).

Our data collection tool is quantitative as it breaks down the examination of each system into various items. Each item scores a single point. For example there were 11 items in the central nervous system examination; six relating to the cranial nerves and five relating to the peripheral nervous system examination. We assigned a score of 50% to any examination marked as 'NAD' or 'grossly intact'. This is an arbitrary figure assigned after consensus agreement by the team conducting this audit. In the end we calculated an average score for each system for the entire sample. Subsequently we generated performance in percentages for each system. The final analysis was the mean of the average scores for all systems, giving us overall performance in terms of thoroughness of examination for our entire sample. The total sample size was 29.

RESULTS

The physical examination was attempted on 23 out of 29 patients at the time of admission, giving us an attempt rate of 79%. Reasons for not examining the remaining six patients were not documented.

Thoroughness of physical examination

Figure 1 illustrates thoroughness of physical examination for every system, as well as overall thoroughness for the entire sample.

The most comprehensively assessed system in our sample was the cardiovascular system with a score of 55%. Excluding rectal examination (see note below), the locomotor system did worst, getting a score of only 15%. The unsatisfactory thoroughness of the neurological examination (37%) is of particular concern, as this is an important component of clinically evaluating mentally ill patients. Per rectal examination was not done on any patient, most probably as this was not indicated.

The overall thoroughness of our sample, as derived by calculating the mean of the average scores for all systems, is 29%. Achieving 100% is difficult and sometimes not practically possible (eg, agitated or violent patient, patient refusing), but clearly this figure needs to be improved.

Data about 'NAD' or 'grossly intact' comments

One examination in respiratory system, three in gastrointestinal and eleven in neurology were marked as 'grossly intact', 'NAD' or similar.

DISCUSSION

This audit highlights a previously reported problem of the thoroughness of physical examination in psychiatric admission. This paper is different from previously published audits, as it refines quantitative assessments of the thoroughness of the physical examination.

We found our method of quantification of thoroughness used in this audit easy and practical. Although the attempt rate in our sample was good (79%), the thoroughness was unsatisfactory (29%).

The poor thoroughness of the neurological and locomotor examination is a cause for concern, and has been consistently reported in previous studies.^(5,6)

Remarks like 'NAD' or 'grossly normal' can sometime be misleading hence we recommend that such remarks be avoided.

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FURTHER READING

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APPENDIX

Physical Examination Audit Data Collection Tool

Target: 100%

General Points

1. Physical examination done on admission yes/no
2. If not done, the documentation of reason ☐
3. If not, when was it done (no. of days after admission.....)

Comprehensiveness of systemic examination

1. General Appearance (tick if present)

- i. Cyanosis ☐
- ii. Clubbing ☐
- iii. Anaemia ☐
- iv. Lymph anodes ☐
- v. Personal hygiene ☐
- vi. Tremor ☐
- vii. Eye sight ☐
- viii. hearing ☐
- ix. Teeth ☐

Score ---- /9

2. Cardiovascular Examination ☐

- I. S1 ☐
- II. S2 ☐
- III. Murmurs, yes/no
- IV. JVP increased/normal ☐

Score -----/4

3. Respiratory Examination

- i. Breath sounds ☐
- ii. Air entry ☐
- iii. Respiratory rate ☐
- iv. Crepitations ☐
- v. Wheeze ☐

Score -----/5

4. PR if applicable ☐

5. Locomotor System

- i. Hips ☐
- ii. Knees ☐
- iii. Hands ☐
- iv. Feet ☐

Score -----/1

Score -----/4

6. Abdominal Examination

- i. Mass ☐
- ii. Liver ☐
- iii. Spleen ☐
- iv. Ascites ☐

Score -----/4

7. Walking

- i. Alone ☐
- ii. With assistance ☐
- iii. Unable ☐
- iv. Gait ☐

Score -----/4

8. Neurology (normal/nature of abnormality)

1. Cranial nerves;

- A. I, II, III, VI (Fundi, Visual Acuity, Eye Movement) ☐
 B. V (Facial nerve) ☐
 C. VIII (Hearing) ☐
 D. IX, X (Uvular deviation, Gag reflex) ☐
 E. XI (Shrug shoulders) ☐
 F. XII (Tongue movements) ☐

	Upper limbs (normal & symmetrical)		Lower Limbs (normal & symmetrical)	
	R	L	R	L
Tone	☐	☐	☐	☐

Power	☐	☐	☐	☐
sensory	☐	☐	☐	☐

Table 1

Reflexes	Biceps	knee	Plantar
Right	☐	☐	☐
Left	☐	☐	☐

Score -----/11

Miscellaneous

Temp ☐	Pulse ☐	BP Lying ☐ Standing ☐	Allergies ☐
Height ☐	Weight ☐	BMI ☐	Urinalysis ☐

Score -----/8

Total Score -----/50