The quality of clinical notes at a Psychiatric Hospital in Saudi Arabia

Khalid S. Al-Gelban, MBBS, Hasan S. Al-Amri, MBBS.

ABSTRACT

Objective: This study aims to display the quality of the clinical notes at Abha Psychiatric Hospital out-patient clinics.

Methods: In this chart review study, a total of 380 charts were randomly collected, and reviewed for the clinical items that should be included in the psychiatric clinical notes. Each chart note quality was indicated as good, fair or poor based on means and standard deviations.

Results: The quality of clinical notes was good in 16.3%, fair in 71.1% and poor in 12.6% of the total

records. The most frequent clearly present items were medications (92.1%), and personal data (91.1%); while the most frequent clearly absent items were psychotherapy (90.8%), and functioning (80.8%).

Conclusion: The quality of psychiatric clinical notes needs to be improved. Practical recommendations regarding this were stressed.

Keywords: Quality, psychiatric notes.

Neurosciences 2001; Vol. 6 (4): 238-241

Medical records are important in every branch of medicine. They represent the primary reference point with respect to the patient's medical status and long-term planning.¹ In addition to being a source of information and a means of communication in the care of patients, the medical record is also becoming document of increasing legal importance. а Incomplete records and a lack of information will always be held against the doctor in the case of complaints or lawsuits.² In psychiatry they are even more vital because a large amount of information is collected from a variety of sources. Unless material is recorded clearly, it is difficult to think clearly about clinical problems and to make appropriate decisions about treatment.3,4 Evaluation of the quality of clinical notes provides a good basis for evaluation of the care and it is an effective form of

medical audit.² Despite the rapid increase in awareness and importance of psychiatric services, to the best of the researchers' knowledge, no studies have been carried out regarding the quality of psychiatric notes in Saudi Arabia. However, several international studies, showed poor quality of psychiatric notes.⁵⁻⁸ This study aims to evaluate the quality of the clinical notes in the out-patient clinics of Abha Psychiatric Hospital (APH).

Methods. The chart review study was carried out during the first half of 1998, in the out-patient clinics of APH, which is a 100 bed hospital located in Abha, the capital city of the Asir region which lies in the southwest region of Saudi Arabia. Abha Psychiatric Hospital serves the whole region, and receives

From the Department of Family and Community Medicine (Al-Gelban), and Department of Psychiatry (Al-Amri), College of Medicine & Medical Sciences, King Khalid University, Abha, Kingdom of Saudi Arabia.

Received 31st January 2001. Accepted for publication in final form 17th April 2001.

Address correspondence and reprint request to: Dr Khalid S. Al-Gelban, Department of Family and Community Medicine (2330), King Fahad National Guard Hospital, PO Box 22490, Riyadh 11426, Kingdom of Saudi Arabia. Tel. +966 (1) 252 0088 Ext. 2018. Fax. +966 (1) 252 0088 Ext. 3219. E-mail: khalidgelban@hotmail.com

referrals from 13 general hospitals, in addition to the private sector. The out-patient services were provided through 31 clinics per week, of around 10 patients per clinic, run by a western board qualified Consultant, and 2 western and 4 Arabic diploma qualified specialists, none of whom are Saudi.

The records were selected randomly by systematic sampling (every 3rd one), from the out-patient clinics. The clinical notes were reviewed thoroughly by the researchers for the clinical items that should be included in the psychiatric notes.9 These items were divided into 2 parts: the first part included the initial assessment notes, which have 15 items: general information (age, sex, job...etc), chief complaint, history of present illness, family history, past psychiatric history, past medical history, drug history, mental status, physical examination, laboratory investigations, formulation, differential diagnoses, final diagnosis, medications and psychotherapy. In the 2nd part, the last follow up notes in the charts were chosen, aiming to avoid selection biases and maintain uniformity. These included 9 items: diagnosis, medication names, doses and side effects, compliance, mental status, progress, functioning and social activities.

In order to show the quality of each individual item, each was labeled as clearly present, clearly absent or implied. To better quantify the quality of the clinical notes, each item was assigned a score of (2) for clearly present, (1) for implied and (0) for clearly absent. The scoring was based on means and standard deviations (Table 1). Data was collected, entered and analyzed, by the researchers, using Epi Info 2000 software.¹⁰

Result. A total of 380 charts were reviewed and entered into the study. The frequency distribution and the quality of the items of the initial assessment notes are shown in Table 2. The most frequent clearly present items were the general information and the treatment. The most frequent implied item was the mental state examination. Psychotherapy was the most frequent clearly absent item. Table 3, displays the frequency distribution and the quality of the items of the follow-up notes. Medication names and

 Table 1 - Scoring system for quality of clinical notes at Abha Psychiatric Hospital.

Quality	Scoring range		
Good	> Mean + 1 SD		
Fair	Mean + 1 SD		
Poor	Poor < Mean - 1 SD		
SD = Standard Deviation			

 Table 2 The frequency distribution and the quality of the initial assessment clinical notes, Abha Psychiatric Hospital, Asir Region, Saudi Arabia.

Item	Clearly present	Implied %	Clearly absent %		
General information	91.1	7.60	1.30		
Chief complaint	75.8	15.3	8.9		
Present illness	27.4	41.8	30.8		
Family history	18.4	41.8	39.7		
Past psychiatric history	31.8	46.8	21.3		
Past medical history	28.4	23.9	47.6		
Drug history	21.6	19.5	58.9		
Mental status examination	35.3	52.6	12.1		
Physical examination	63.4	11.8	24.7		
Laboratory investigation	77.9	2.40	19.7		
Formulation	21.6	2.40	48.4		
Differential diagnosis	38.7	29.5	45.0		
Final diagnosis	78.4	16.3	13.9		
Treatment	91.8	7.60	7.40		
Psychotherapy	3.70	0.80	90.8		
% = percentage, N = 380					

 Table 3 The frequency distribution and the quality of the follow-up notes, Abha Psychiatric Hospital, Asir Region, Saudi Arabia.

Item	Clearly present %	Implied %	Clearly absent %	
Diagnosis	36.1	20.8	43.2	
Medication	92.1	2.90	5.0	
Dosage	92.4	3.40	4.20	
Compliance	18.4	25.40	56.1	
Side effects	18.2	18.9	62.9	
Mental status	20.8	62.6	16.6	
Progress	26.60	60.8	12.6	
Social activities	13.4	9.70	76.8	
Functioning 6.3		12.9	80.8	
% = percentage, N = 380				

Table 4 - The quality scoring of clinical notes at Abha P	Psychiatric Hospital, Asir Region, Saudi Arabia.
---	--

Notes	Total score	Mean	SD	Good	Fair	Poor
Initial	30	17.46	5.8	23-30	13-22	0-12
Follow-up	18	8.76	3.66	13-18	5-12	0-4
Overall	48	26.2	7.4	34-48	19-33	0-18
SD = Standard Deviation, N = 380						

dosages were the most frequent clearly present items, while the most frequent implied items were the mental state examination and the progress. Functioning was the most frequent clearly absent item. Table 4, summarizes the means and the scoring ranges for the quality of the clinical notes. Table 5, shows that, around 2 thirds of the initial assessment, 3 quarters of the follow-up and 3 quarters of the notes were of fair quality.

Discussion. Better health care systems usually have better medical notes.⁴ This study showed that the majority of the clinical notes at APH are incomplete. Unfortunately, no local studies have been found in this field to compare with; however, the study results are comparable with those of other international investigators. According to the result reported by Small et al in USA⁵, missing data included family history of psychiatric illness (60.3%), history of substance abuse (44.9%), marital status (37.2%), previous psychotropic drug use (35.9%), previous psychiatric treatment (26.9%), and patient history of psychiatric illness (24.4%), which are in agreement with other international studies.⁶⁻⁸

General information, chief complaint, final diagnosis and medication components were present in the majority of the initial assessment notes. However, other psychiatric components were not clear or absent, this could be related to the crowded clinics, so time was not enough to report these details, or they were not taken initially because of

 Table 5 - The quality distribution of psychiatric notes, Abha Psychiatric Hospital, Asir Region, Saudi Arabia.

Notes	Good No (%)	Fair No (%)	Poor No (%)		
Initial assessment	82 (21.6)	243 (63.9)	55 (14.5)		
Follow-up	72 (18.9)	293 (77.1)	15 (3.9)		
Overall 62 (16.3) 270 (71.1) 48 (12.6)					
No = Number, % = percentage					

underestimating the importance of these items. Psychotherapy was missing in most of the notes. This could be due to the doctors unawareness about the importance of documenting this type of data, too short a time to do it for each patient or lack of experience in this type of therapy.

Drug abuse and dependence are common problems and have a very strong connection with psychiatric disorders,^{11,12} therefore, inquiry regarding them is an essential part of any psychiatric history. However, they were absent in most of the initial assessment notes. The reason could be that the hospital is not authorized to manage drug abuse cases, which pushed the doctors to neglect this item. Again, the majority of the follow-up notes were incomplete. Diagnoses were not written in the majority of them, this could waste the time of other doctors when looking for diagnoses.

Despite medications and dosages being clearly present in most of the follow-up notes, they were absent in 5%. In the absence of a good pharmacy drug registration system, this may confuse doctors especially if medications or dosages were changed. Many psychiatric medications are bound to failure when patients do not comply, and adverse effects are the major cause for non-compliance;^{9,13} comments on poor compliance and side effects were absent in the majority of the follow-up notes. Social and occupational aspects of patients conditions were absent in the majority of the notes, although, very often they are affected by psychiatric disorders. This reflected the doctors' attitude towards concentrating on biological rather than biopsychosocial aspects of management.

From the present study, it appears that there is a need to improve the quality of psychiatric clinical notes. Periodic evaluation and Continuous Medical Education (CME), which reflects the real daily practice and learning needs assessment, have proved to be successful in improving the quality.^{14,15} In the light of the increase of population numbers and community awareness regarding psychiatric illnesses, it is essential to establish a residency training program for psychiatry in this region, and to motivate Saudi doctors to specialize in this branch of medicine.

Further studies in this field are needed to explore the barriers preventing psychiatrists from writing good clinical notes.

References

- 1. Gramm RR, Morgan G. Medical record innovations that can improve physician productivity. J Med Syst 1999; 23: 133-144.
- Nylenna M. High quality medical records-high quality medicine. Tidsskr Nor Laegeforen 1992; 112: 3560-6564.
- Gelder M, Gath D, Mayou R, Cowen P. Oxford Textbook of Psychiatry. 3rd ed. New York: Oxford University Press; 1996. p. 45-46.
- Sabanovic Z, Mujagic H, Bazardzanovi M. Quality of medical records as a basis for DRG classification in the health care system in Bosnia-Herzegovina. Med Arh 1999; 53: 61-64.
- 5. Small GW, Fawzy FI. Data omitted from psychiatric consultation notes. J Clin Psychiatry 1988; 49: 307-309.
- 6. Ellis PM, Mellsop GW, Peace KA, Wilson JM. Peer review as an aid to improving the completeness of psychiatric case notes. Med Educ 1987; 21: 493-497.
- Mellsop GW, Ellis PM, Wilson JM, Peace KA. A review of psychiatric case notes. Aust Clin Rev 1985; 5: 127-130.

- 8. Baker JG, Shanfield SB, Schnee S. Using quality improvement teams to improve documentation in records at a community mental health center. Psychiatr Serv 2000; 51: 239-242.
- Kaplan HI, Sadock BJ. Kaplan and Sadock's Synopsis Of Psychiatry: Behavioral Sciences, Clinical Psychiatry. 8th ed. Baltimore: Maryland, Lippincott Williams and Wilkins; 1998. p. 240-274.
- Dean AG, Arner TG. Epi Info 2000: A Database, and Statistics Program for Public Health Professionals Using Windows 95,98,NT, and 2000 Computers. Centers for Disease Control and Prevention (CDC). Atlanta, Georgia, USA.
- 11. Kozel NJ, Adams EH. Epidemiology of drug abuse: an overview. Science 1986; 234: 970-974.
- Rouse BA. Epidemiology of illicit and abused drugs in the general population, emergency department drug-related episodes, and arrestees. Clin Chem 1996; 42: 1330-1336.
- 13. Lagomarsino AJ. Patient non-compliance with medication. Acta Psiquiatr Psicol Am Lat 1988; 34: 127-134.
- Lorenzoni L, Da Cas R, Aparo UL. The quality of abstracting medical information from the medical record: the impact of training programmes. Int Qual Health Care 1999; 11: 209-213.
- Aguado Mingorance JA, Gaston Morata JL, Bueno Cavanillas A, Lopez Gigosos R, Rodriguez-Contreras Pelayo R, Galvez Vargas R. Quality of medical records at a primary care center. Gac Sanit 1991; 5: 214-218.