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An audit of medical record-keeping in maxillofacial surgery at the UniversityCollege Hospital, Ibadan using the CRABEL scoring system.

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Summary
Standard medical note keeping is an important aspect of patient management, and the importance of completeness of patients' records cannot be overemphasized, especially for the purpose of auditing, research, and medico-legal reasons. It is also an integral part of a good medical practice. However gross inadequacies are often noted. This may be partly due to the fact that until the recent past, cases of medical and professional negligence were uncommon in our environment. This audit exercise was embarked upon to assess the standard in the department using the CRABLE Scoring system with a view to standardizing and improving our practice. The result showed that the subsequent entry part of the medical notes assessed was marginally the best with a score of 66.5%, followed by initial entry which scored 65.3%, while consent had a score of 57.8%. The worst aspect of the notes was the discharge summary with a mean score of 29%. A total mean score of 61.6% was achieved. Despite the limitations of the CRABEL Score such as the subjectivity of the assessment of the legibility of entries under subsequent entries, and perhaps the need to adapt it to our local and peculiar environment, it is useful as a regular auditing mechanism to improve medical keeping.

Keywords: *Audit, medical note keeping, CRABEL score*

Résumé
La protection du fichier standard est un aspect important du ménagement du patient et la documentation propre et nette du fichier du patient ne peut pas etre sous-estimée, espéciallement pour le but d'audit, de recherche, et des raisons medico-légales. C est aussi une partie important des pratiques de la bonne médicine. Cependant des grandes fautes sont trés souvent notées dans notre environement , peut etre du a la négligence des proffesionels de santé. Cette exercice d'audit était faite to évaluer le standard dans le département utilisant le systéme de score de CRABBLE dans l'ordre de standardiser et améloirer nos pratiques. Les résultants montraient que les entrées d après évaluées, étaient plus meilleur marginalement avec un score de 66.5% qu'a l'initial de 65.3%, alors que le consentement avait un score de 57.8%. L aspect le plus mauvais des fichiers était le résumé de la décharge du patient avec un score moyen de 29%. La moyenne totale achevée de 61.6%.Malgré la limitation de la sujectivite du systéme de score de CRABLE pour l'évaluation de la lésibilité des entrées et peut etre le bésion de l adaption en fonction des réalités locale et environementale réguliere.Il est utile pour usage régulier du méchanisme d audit pour améliorer la protection des fichiers medicaux.

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Introduction

The art of medical note taking is highly essential in patients care as history and clinical examination remain the most important skills for the doctor despite the emergence of modern diagnostic tests or procedures [1]. The importance of completeness of patients' records cannot be overemphasized especially for the purpose of auditing, research, and medico-legal reasons. It is also a necessary ingredient of a good medical practice.

It has been noted that doctors usually fail to document important information in the patient's notes [2-4]. The result of such omissions can be far-reaching as it may lead to, inadequate, inappropriate or wrong treatment, the consequences of which may sometimes be fatal.

Adequate training and retraining of doctors in the art of good medical note taking and documentation should be the goal of a good health care system. Where there are no standard proforma or protocols, there are usually gross errors or inadequacies in the standards of note keeping [5,6]. It is therefore an essential part of a good medical practice to periodically perform an audit of medical notes to ensure the maintenance of an optimum standard of note keeping.

The CRABEL Score [6] developed by Crawford, Beresford and Lafetty, provides such as a protocol for standard note keeping. It gives numerical score for the essential aspect of medical records and allows comparison between units, firms, specialties and hospitals. This audit exercise was embarked upon to assess the standard of medical notes in the department using the CRABLE Scoring system with a view to standardizing and improving it.

Materials and method

One hundred patients treated within a three year-period (2000-2002) in the department of oral and maxillofacial surgery under general anaesthesia whose medical records were available were selected. The records in each case note selected were assessed and graded using the CRABEL Scoring system (Appendix 1). A total of 50 marks were shared between initial entries (10 marks), subsequent entries (30 marks), consent (5 marks) and 5 marks were awarded to discharge letters. For initial entries, comprising of ten essential items, a mark was deducted for each omission and for Subsequent entries comprising of six items, any omission resulted in the deduction of 5 marks.

Consent and Discharge letters had five items each with each item scoring a point and each omission resulting in the deduction of a point.

Results

The mean percentage score by initial clerking was 65.3% and the maximum scored by any note was 9, while the minimum was 4.

Subsequent entries had a marginally higher mean score of 66.5%, with a maximum and minimum score per note of 30 and 10 respectively. Consent and Discharge both had a maximum score of 5 and minimum scores of 2 and 0 respectively. The mean percentage score for consent was however 57.8% while discharge was 29 (Tab 1). Details of notes showed that while patients' bio-data were usually almost always fully written, the admitting consultant's name and the time of clerking were often omitted.

Table 1: CRABEL scores for 100 maxillofacial case notes at the University Teaching Hospital, Ibadan.

Item	Mean % score	Maximum score/note	Maximum score/note
Initial Clerking	65.3	9	4
Subsequent Entries	66.5	30	10
Consent	57.8	5	2
Discharge	29	5	0
Mean Total Score =	61.64%		

In addition, while signature of the clinician taking notes was always at the end of each entry, the names and post were usually omitted. In consent documentation, clinician consistently failed to document risk and complications appropriate to each surgical procedures.

Discussion

Note keeping is an integral aspect of patient management; however, this all important matter is not usually given the attention and seriousness it deserves [5]. Dhariwal and Gibbons [7] found the CRABEL Score to be an objective, simple, quick and repeatable instrument for the purpose of regular auditing of medical note taking and consequently improving it.

From the result obtained in this audit, the subsequent entry aspect was the best part of the entire records though marginally so, being only 1.2% ahead of initial clerking. The fact that clinicians consistently failed to document risk of complications appropriate to the procedure while obtaining consent, though these could have been verbally communicated to the patient, may be due to the nature of design of the consent proforma forms currently in use in the hospital which does not make provision for these items. It is however not only necessary to discuss the likely complications with the patient for an informed decision to be made, but very important for these to be fully documented for medicolegal reasons.

We therefore recommend a redesigning of the current consent form to take care of the omissions. The discharge summaries were the most deficient with a mean score of 29% and in 20% of the notes audited, discharge summaries were missing. A mean total score of 61.6% achieved is considered rather low; this may not be unconnected with the fact that there is no protocol or proforma for note taking in the department.

Another possible factor in some of the gross inadequacies is the fact that junior members of the team are often the ones charged with the responsibility of taking notes and due to the pressure of work, the more senior members of the team have not been providing adequate supervision.

This audit exercise has pointed to the fact that there is need to make drastic changes to improve standards. In view of the various deficiencies detected, we recommend the provision of structured protocol for note keeping in the department which will help in standardizing entries into the patients' records.

Conclusion

Despite the limitations of the CRABEL score such as the subjectivity of the assessment of the legibility of entries under subsequent entries, and perhaps the need to adapt it to our local and peculiar environment, we recommend the introduction of the CRABEL scoring system as a regular auditing mechanism to improve medical note keeping. The importance of regular training and retraining of clinicians especially the junior doctors in the art of medical note taking cannot be over emphasized.

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Appendix 1 **CRABEL Score** [6]

Initial clerking (10points)

- Patient's name (at the top of history sheet)
- Patient's hospital number (at the top of history sheet)
- Referral source (general practitioner, dentist, A&E)
- Admitting consultant
- Date/Time of Clerking
- Working diagnosis or differential diagnosis

- Management plan
- Results of investigations
- Signature of clinician at the end of clerking
- Name, post and signature of clinician

Subsequent entries (30 points)

- Patient's name and number at the top of each history sheet
- Date and time of each entry
- Heading (ward round and consultant's name)
- Results (as documented in notes)
- Notes should be legible
- Signature, name, post and bleep number

Consent (5 points)

- Patient's name at top of sheet
- Hospital number at top of sheet
- Operation in full without abbreviation
- Risk of complications appropriate to the procedure
- Signatures of clinician and patient or guardian

Discharge letters (5 points)

- Patient's details (name and address)
- Admission and discharge dates
- Diagnosis and management
- Medication on discharge
- Follow up plans

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