

Original Research Article

THE ACCURACY OF MEDICAL TERMINOLOGY, FRACTURE CODE AND EXTERNAL CAUSE ON SUMMARY FORM PATIENTS

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ABSTRACT

Introduction. Writing the main diagnosis on the exit summary sheet must be written based on medical terminology that is precise, clear, and complete, in order to assist coding officers in coding the diagnosis. Based on the initial survey, the inaccuracy of writing medical terminology for fracture diagnosis was 70%. This study aims to determine the accuracy of writing medical terminology on fracture diagnosis on the summary sheet for inpatient discharge. **Method.** This type of research is a descriptive study, with data collection methods using interviews and observations, as well as a retrospective approach. The sample of this study was 86 which were obtained from 669 populations. Sampling was done by simple random sampling. The research instruments were observation guide, interview guide, work table, ICD-10, medical dictionary, English dictionary, and medical terminology book. Data processing by editing, coding, data entry, tabulation, and data presentation. Data analysis was done descriptively. **Results&Analysis.** The accuracy of writing medical terminology for the main diagnosis is 22.09%, with 77.91% inaccuracy. The accuracy of writing medical terminology for secondary diagnosis is 66.67%, with inaccuracy as much as 33.33%. **Discussion.** The author suggests making SOPs related to writing medical terminology, updating guidelines, revising SOP coding and indexing.

Keywords: External Cause, Fracture Code, Accuracy

INTRODUCTION

Everyone's socially and economically productive life can be supported by health, both physically, mentally, spiritually, and socially healthy. Health is also a form of national welfare that has an important role in the development of quality human resources. In this regard, the government strives to improve health status through activities carried out in an integrated and sustainable manner, by maintaining and improving public health degrees in the

form of disease prevention, health promotion, disease treatment, health restoration by the government and the community (Law No. 36 of 2009 concerning Health). One of the health service facilities that carry out health efforts in the community is a hospital.

According to the Law of the Republic of Indonesia No. 44 of 2009 concerning Hospitals, hospitals are health service institutions that provide complete individual health services that provide inpatient, outpatient, and emergency services. Orderly hospital administration

is very important in the context of efforts to improve services. Facilities that support its implementation are medical records.

According to the Ministry of Health of the Republic of Indonesia (2006), medical records are defined as written and recorded information regarding identity, history taking, physical examination, laboratory, diagnosis and all medical services and actions provided to patients, and treatment whether inpatient or outpatient. , as well as those who receive emergency services. Medical records require other information to be recorded, one of which is the final diagnosis, either primary, secondary, or complications.

Hatta (2011) in Sudra and Pujihastuti (2016) said that writing diagnoses made by doctors must use medical terminology and use block letters so that they can be read easily and clearly. One of the factors causing the inaccuracy of writing a diagnosis is because the doctor does not use medical terminology correctly so that there is an error in writing the diagnosis. The impact that occurs when the writing of the diagnosis is not correct is that it affects the cost of health services, data and information on hospital reports are not correct. The use of non-specific medical terminology will also have an impact on inaccurate

diagnosis codes (Sudra and Pujihastuti, 2016).

Writing the main diagnosis on the exit summary sheet which must be written based on precise, clear, and complete medical terminology, in order to assist coding officers in selecting lead terms or commonly referred to as "key words" and coding the diagnosis in the coding section. The coding can use the standard identification and classification of diseases in accordance with the International Statistical Classification of Disease and Related Health Problem Tenth Revision (ICD-10) (Depkes RI, 2006). The selection of the right lead term will affect the accuracy of the code.

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The World Health Organization (WHO) released The Global Report on

Road Safety and placed Indonesia in third place as a country with a total of 38,279 total deaths due to accidents in 2015. Data from the 2015-2016 Traffic Accident Analysis and Evaluation (Anev) states that the number of accidents in 2016 reached 237 incidents with the death toll reaching 56 people, and material losses reaching Rp. 2,302,950,000.00.-. According to the Indonesian Ministry of Health (2013), from the total number of accidents that occurred, there were 5.8% of injured victims or about 8 million people who experienced fractures with the most common types of fractures, namely upper extremity fractures of 36.9% and 65.2% lower extremity fractures (Depkes RI, 2013).

RSUD dr. Soediran Mangun Sumarso Wonogiri is a regional hospital with type B Non-Education and has a plenary accreditation status. This hospital provides outpatient, inpatient, and emergency services. This hospital has 17 polyclinics, one of which is an orthopedic surgery polyclinic to treat patients with fracture cases. The total number of inpatients at RSUD dr. Soediran Mangun Sumarso Wonogiri in 2017 amounted to 17,874 patients, 3.74% of whom were patients with fracture cases.

The results of a preliminary survey conducted by the researcher, it was found that the writing of terminology on the

return summary sheet for 10 random samples of 2017 medical record documents with a fracture diagnosis showed that the writing of medical terminology for the diagnosis of fracture was 70% greater than the correct writing of 30%.

METHOD AND ANALYSIS

This research is included in descriptive research. According to Notoatmodjo (2010), a descriptive study is defined as a research conducted to describe or describe a phenomenon that occurs in society. The researcher used a retrospective research approach. The retrospective approach according to Notoatmodjo (2010) is a research that seeks to look backwards (backward looking). In this study, the data were all data related to the writing of medical terminology, the main diagnosis and the accuracy of the fracture code and external cause on the summary form for inpatients at RSUD dr. Soediran Mangun Sumarso Wonogiri in 2017. According to Siregar (2014), a variable is defined as a concept that has various values, in the form of quantitative and qualitative which can change in value.

The variables in this study are: the procedure for recording the diagnosis, the coding procedure for the diagnosis, the accuracy of writing the medical

terminology for the diagnosis of fracture. The population is an object or subject that has certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2014). The population in this study were all medical record documents of inpatients diagnosed with fractures at dr. Soediran Mangun Sumarso Wonogiri in 2017 a total of 669 medical record documents. Based on the results of calculations using the Slovin formula, researchers took a sample of 86 medical record documents with a fracture diagnosis.

The researcher used a simple random sampling technique or simple random sample. Researchers will take samples by drawing lots of the entire population and taking a number of samples that have been calculated. This technique is a sampling technique that provides equal opportunities for each member of the population to be sampled (Siregar, 2014).

Data obtained directly by conducting interviews with the head of the subdivision of medical records and coding officers as well as observing the forms in the medical record documents of inpatients which include: summary of admission and discharge, summary of discharge, initial assessment of hospitalization, reports of operations/actions, radiology results.

laboratory results, integrated care progress notes (CPPT), initial assessments for emergency doctors and nurses, triage, hospitalization orders, drug administration forms, internal transfer sheets and other forms that can provide additional information.

Secondary data in this study is internal secondary data, namely, hospital profiles, SOPs for recording diagnoses, SOPs for coding diagnoses, SOPs for filling out forms, and inpatient disease index which are used to find out the medical record number with a fracture diagnosis as a guide in finding medical record documents. to be analyzed.

Data collection methods that will be used by researchers are observation and interviews. The data processing stage carried out after the required data has been collected is editing (data editing), coding, data entry (data entry), tabulation and data presentation.

RESULT

A. Procedure for Recording Fracture Diagnosis on Summary Sheet for Inpatient Discharge at RSUD dr. Sudirman Mangun Sumarso Wonogiri

The procedure for recording a diagnosis or standard operating procedure (SOP) for recording a diagnosis does not yet exist in hospitals that refer to the authority for its implementation to the

medical committee. The results of observations on the Summary Sheet for Inpatient Discharge at RSUD dr. Soediran Mangun Sumarso Wonogiri, there are still diagnostic writings that use non-standard symbols and abbreviations according to the guidelines for abbreviations, symbols, and terms No. 78.2 of 2016, also shows that there is less specific diagnosis writing. For example the abbreviation Cl which is defined as Close which in the guide stands for Chloride, the symbol # which means fracture but is not regulated in the guideline, and diagnosis # R which means fracture radius but in the guide R stands for Respiration.

The results of interviews with coding officers at RSUD dr. Soediran Mangun Sumarso Wonogiri, said that most of the diagnosis writing was in accordance with medical terminology in general, both abbreviations and terms used. Most of the diagnoses can be read, but in some doctors there are diagnoses that are not read or are not filled with diagnoses.

B. Fracture and External Cause Coding Procedures in Medical Record Documents of Inpatients at RSUD dr. Sudirman Mangun Sumarso Wonogiri

Based on the results of the interviews, the sheets used in coding one of them were the return summary sheets which previously used the entry and exit

summary sheets. The SOP states that the form for recording the code is the Incoming and Outgoing Summary Form, but in its implementation it has been changed to the Return Summary Form. The reason the hospital made the change was because both forms had the same format, so the Incoming and Outgoing Summary Forms were replaced with the Discharge Summary Forms. The SOP has not undergone any changes related to the switching of forms.

Director Regulation Number 04/001.b-A Year 2016 concerning Hospital Service Policy at the Regional General Hospital dr. Soediran Mangun Sumarso explained that for coding the diagnosis and patient mortality using ICD-10 (International Classification of Disease Revision 10) and for coding actions using ICD-9-CM (International Classification of Disease Revision 9 Clinical Medicine). Standard operating procedures (SOP) on coding and indexing at RSUD dr. Soediran Mangun Sumarso Wonogiri was published on April 11, 2016 with no. document : 021/01/002. This SOP explains the steps for coding disease, mortality codes, action codes, as well as coding and indexing procedures for both outpatient and inpatient documents.

C. Accuracy and Inaccuracy in Writing Medical Terminology in Writing Fracture Diagnosis on Summary

Sheets for Inpatients Discharged at RSUD dr. Soediran Mangun Sumarso Wonogiri 2017

Researchers observed the writing of medical terminology in the main diagnosis column and external causes written on the discharge summary sheet, based on ICD-10, Dorland's dictionary and medical terminology books. The results showed that the frequency of accuracy and inaccuracy in writing medical terminology for primary and secondary diagnoses in RSUD dr. Soediran Mangun Sumarso Wonogiri in 2017 are as follows:

Table 1. Accuracy and Inaccuracy of Writing Medical Terminology Main and Secondary Diagnosis

Type of Diagnosis	Diagnostic Writing				Number of Documents
	Appropriate		Not exactly		
	F	%	F	%	
Main Diagnosis	19	22,09 %	67	77,91 %	86
Secondary Diagnosis	16	66,67 %	8	33,33 %	24

Table 1 shows the accuracy of writing medical terminology for the main diagnosis as much as 22.09% or 19 documents, smaller than the inaccuracy in writing the main diagnosis as much as 77.91% or 67 documents. The accuracy of writing secondary diagnosis medical terminology in 24 documents that have a secondary diagnosis is 66.67% or 16

documents, greater than the inaccuracy in writing a secondary diagnosis of 33.33% or 8 document.

DISCUSSION

A. Procedure for Recording Fracture Diagnosis on Summary Sheet for Inpatient Discharge at RSUD dr. Sudirman Mangun Sumarso Wonogiri

The results of the observations revealed that there was no standard operating procedure (SOP) regarding recording the diagnosis. SOP according to Permenkes No. 512 of 2007 concerning Practice License and Implementation of Medical Practice is a set of standardized instructions/steps to complete a certain routine work process. SOPs are very important in relation to the implementation of hospital accreditation. The 2012 Accreditation Document Preparation Guidelines state that SOPs have benefits, one of which is meeting the requirements for hospital accreditation/accreditation service standards.

According to Sabarguna (2008), SOPs have a purpose, one of which is to avoid mistakes and confusion in carrying out tasks. Rohman (2011) states that the existence of a fixed procedure (protap) will affect the inaccuracy in writing a diagnosis. The impact that occurs if the writing of the diagnosis is not correct is an

error in selecting the lead term used for disease coding, as well as an error in coding. Therefore, hospitals should make SOPs on recording diagnoses according to medical terminology and ICD-10 to avoid code selection errors.

Based on the results of observations, it is still found that the writing of the diagnosis is less specific and the use of symbols and abbreviations is not standard. The Ministry of Health (2006) states that the diagnosis in the medical record must be written completely and clearly by medical personnel (doctors) in accordance with ICD-10 directions. Writing a diagnosis that is not specific will affect the nature of the diagnosis which should be informative. According to Permenkes No. 76 of 2016 concerning Guidelines for Indonesian Case Base Groups (INACBG's), a diagnosis must be informative in order to be classified in the ICD code. Writing a diagnosis in accordance with the ICD will produce an accurate code so that the resulting claim is also correct. Saraswati and Sudra (2015), errors in coding will have an impact on financial losses experienced by hospitals. Therefore, it is better to disseminate information about writing a complete and informative diagnosis to doctors, nurses, and other medical personnel to avoid hospital losses.

Based on the results of observations, it is known that most of the diagnosis writings are not in accordance with medical terminology and guidelines for abbreviations, symbols, and terms issued by hospitals. Writing abbreviations or terms in writing a diagnosis must be adjusted to the guidelines for symbols, terms, and abbreviations that have been published by the hospital and ICD-10, with the aim that the writing of the diagnosis can be uniform. Uniformity and consistency in the use of medical terminology according to ICD-10 in Khabibah and Sugiarsi (2013) will have an impact on increasing the accuracy of the diagnosis code. Guidelines for abbreviations, symbols and terms published in 2016 by hospitals should be evaluated, in order to follow scientific developments, which affect the addition of new medical terms, symbols and abbreviations.

B. Fracture and External Cause Coding Procedures in Medical Record Documents of Inpatients at RSUD dr. Sudirman Mangun Sumarso Wonogiri

Based on the observation, it is known that RSUD dr. Soedirman Mangun Sumarso Wonogiri has issued a director's regulation on the use of ICD-10 for coding diagnosis and ICD-9-CM for coding actions/procedures. The use of

ICD-10 for disease coding is a policy issued by the government through the Decree of the Director General of Medical Services No. HK.00.05.1.4.4.00744 concerning the Use of the International Classification of Diseases of the Tenth Revision (ICD-10) and the Decree of the Minister of Health of the Republic of Indonesia No. 50/Menkes/Sk/I/1998 concerning the Implementation of the International Statistical Classification of Diseases of the Tenth Revision (ICD-10).

RSUD dr. Soediran Mangun Sumarso Wonogiri already has a SOP on coding and indexing. Sabarguna (2008) states that one of the goals of the fixed procedure is to serve as a reference in how to carry out certain tasks and become a benchmark for its implementation. The procedure for implementing the existing coding in RSUD dr. Soediran Mangun Sumarso Wonogiri is used as a reference to determine the steps for assigning disease codes, which have been explained in the disease code method in the SOP. The coding steps used are in accordance with the theory presented by Hatta (2011) and the Ministry of Health (2006). However, based on the results of observations, if a diagnosis is found that often appears, the coding officer does not carry out the steps in the SOP correctly, but immediately gives the code. The resulting impact is the occurrence of

coding errors in several documents found by researchers when conducting observations. According to the MKI 13 hospital accreditation standard, uniform use of diagnostic codes and procedure/action codes supports data collection and analysis. The data collected will be used as material for making reports and hospital statistics (Sudra 2010). If the data is of good quality, the policies generated based on hospital reports and statistics will meet the target.

Based on the results of the interviews, the sheets used in coding one of them were the return summary sheets which previously used the entry and exit summary sheets. The SOP states that the form for recording the code is the Incoming and Outgoing Summary Form, but in its implementation it has been changed to the Return Summary Form. Reasons for the hospital to make changes because the two forms have the same format, the Incoming and Outgoing Summary Forms are replaced with the Return Summary Forms. The SOP has not undergone any changes related to the switching of forms.

According to Yuliana, et al (2014) a good SOP will be a guide for implementers, communication tools, and work will be consistent. The manual for the preparation of the 2012 medical record accreditation document also explains that

the purpose of preparing SOPs is to carry out various routine work processes efficiently, effectively, consistently/uniformly and safely, in order to improve service quality through compliance with applicable standards. The impact if the SOP has not been changed is that there is no uniformity between the implementation and the applicable rules. So it is better to revise the SOP regarding changes to the code recording sheet, so that services can run consistently and the quality of service is getting better.

C. Accuracy and Inaccuracy in Writing Medical Terminology in Writing Fracture Diagnosis on Summary Sheets for Inpatients Discharged at RSUD dr. Soediran Mangun Sumarso Wonogiri 2017

Based on the results of observations, it is known that the number of accuracy in writing the main diagnostic medical terminology on the discharge summary sheet is 19 documents (22.09%) which is smaller than the inaccuracy of 67 documents (77.91%). The accuracy of writing secondary diagnostic terminology is 16 documents (66.67%) which is greater than the inaccuracy of 8 documents (33.33%). While the inaccuracy of writing external cause is 100% incorrect. Medical terminology according to Nuryati (2011) is the science of medical terminology (medical terms)

which is a special language between medical or health professions, both in written and oral form. Most of the structures of medical terms are composed of 3 (three) word elements, namely: prefix, root and suffix.

Writing appropriate medical terminology for the main diagnosis, for example in the diagnosis of Fr. of zygoma. Writing the abbreviation Fr. in accordance with the abbreviations that have been determined by the hospital in the abbreviation, symbol and term guide number 78.2, which means fracture. The term fracture according to Dorland (2012) has the meaning of breaking a part, especially bone. Writing an appropriate secondary diagnosis for example in the diagnosis of Anemia in accordance with the theory of Nuryati (2011) which states that the term "Anemia" consists of "a, an-" which is a prefix which means "without, no, not". and "emia" which is a root (basic word) which means "related to blood" so that it can be interpreted as a condition of lack of red blood cells; less blood.

The most inaccuracy in writing medical terminology for the main diagnosis is in the classification of the use of terms and abbreviations as many as 38 documents which are bigger than the correct 4 documents. One example is in the diagnosis of CF of distal of the left radius, where the abbreviation CF is used

for the term Close Fracture. According to Dorland (2012) CF has an abbreviation of cardiac failure and christmas factor which is not in accordance with the purpose of the diagnosis, and is not in the abbreviation and symbol guidelines in hospitals. Writing an inappropriate secondary diagnosis, for example, the correct diagnosis of ARI is "Acute upper respiratory infection" or in Indonesian it is called Acute Respiratory Infection. The writing of this abbreviation in the guidelines for abbreviations, symbols and terms published by the hospital does not match the actual term, namely Acute Respiratory Infection, but in the guidelines it stands for Upper Respiratory Tract Infection.

CONCLUSION

Based on the results of research conducted at RSUD dr. Soediran Mangun Sumarso Wonogiri in 2017, it can be concluded that:

1. RSUD dr. Soediran Mangun Sumarso Wonogiri does not yet have an SOP related to recording a diagnosis that is in accordance with medical terminology, but already has guidelines for abbreviations, symbols and medical terms with no. 78.2 published in 2016.
2. RSUD dr. Soediran Mangun Sumarso Wonogiri already has an SOP on coding and indexing, but the

operational implementation is not appropriate because there is a change in writing code from the Incoming and Outgoing Summary Form to the Return Summary Sheet due to the same content format, the accuracy of writing medical terminology for the main diagnosis is 22.09% or 19 documents, smaller than the inaccuracy in writing the main diagnostic medical terminology of 77.91% or 67 documents.

3. The accuracy of writing medical terminology is small from code inaccuracies as much as 74.42% or 64 documents. Factors that affect the accuracy of writing translations and the lack of accuracy of a coder, medical terminology, among others, is caused by policies regarding standard procedures for recording diagnoses that do not yet exist in hospitals.
4. The diagnosis in most of the samples was non-specific; and in some doctors there are diagnoses that are not filled in, influencing factors and in some doctors there are diagnoses that are not filled in.
5. The accuracy of writing medical terminology for external cause is 0% correct or 86 documents studied have inaccuracies in writing medical terminology for external cause.

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