




CASES REPORTS

External Cause Clinical Coding In UMM Hospital Achmad Jaelani Rusdi¹, Rokhman Handoyo², Queenyta Srikandi Salsabila³

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ABSTRACT

The completeness of the information provided by the doctor from the beginning of the patient's admission to the patient's discharge is very influential on the coding of external causes. In UMM Hospital, the author found that the coding of morbidity or external causes of a disease was not carried out by coding officers. This is the reason why the author raises the case regarding external cause coding. The purpose of this study was to analyze the influence factors of external cause codification that were not carried out in the medical record file. The methodology used is case reports on 3 medical record files with different morbidity cases. The results showed the results of the study based on the accuracy of the diagnosis from the 3 files that had been studied, it was found that there were inconsistencies of doctors in providing diagnoses to patients from the beginning of the patient's admission to the patient's discharge. This is one of the obstacles for officers in providing specific codes

Keywords: coding, external cause, morbidity

1. INTRODUCTION

The international classification system of diseases or commonly referred to as ICD-10 has become a global standard in the classification and codification of diseases, symptoms, injuries, and conditions that affect human health. The diagnosis code is a

combination of numbers with letters that represent components of a data [1]. The use of ICD-10 in morbidity coding has become a strong foundation in the analysis, collection, and also exchange of healthdata worldwide. Almost all hospitals implement ICD codes using three characters or four more detailed characters, but some do not use ICD-10 at all [2]. Through the proper use of the ICD-10 code, information regarding the cause of the accident, the mechanism of injury, the location of the incident, and its nature can be clearly and accurately recorded in the patient's medical resume. The completeness of the information provided by the doctor becomes an important factor in coding [3].

From observations that have been made at the General Hospital of the University of Muhammadiyah Malang shows where the codification of morbidity or external causes of a disease is not carried out by coding officers. This has an effect on improving the consistency and accuracy of coding [4]. One example found by researchers is where the chronology of accident cases is not written completely and accurately. Errors often occur due to the complexity of maintaining medical information [5]. This is the reason why the author raises the case regarding external cause coding. This research is useful as input material for the hospital in managing and determining a complete and accurate external cause code, as well as improving the performance of medical record officers in coding external causes. Not only that, proper information processing affects the improvement of the quality of health services in hospitals [6]. Any external causal cores must be rerepresented to facilitate extraction from the code for analysis [7]. In addition, this study aims to analyze the influence factors of external cause codification that are not carried out in medical record files.

2. CASES

This paper consists of three cases with the following conceptual framework in figure 1.

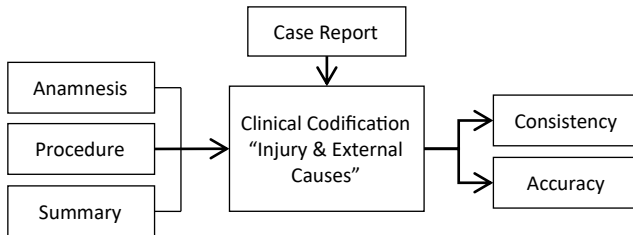


Figure 1. Conceptual Framework of Case Report

2.1 CASE 1

Case 1 with initial diagnosis of Fracture at wrist and hand level. In the anamnesis form, the patient came to the emergency room with the main complaint of pain in the right leg after falling off the motorcycle 1 hour before the patient was taken to the hospital. The patient was also found with lacerations on the left leg, left hand, and left lip. The patient was bleeding but did not vomit. From the physical examination, it was found that patients with compostmentic states of consciousness. During the examination in the emergency room, the patient was diagnosed with an early comminuted fracture of the tibia fibula and then hospitalized.

The results of supporting examinations found patients with radius epiphyses discontinuity with volar displacement and from other examinations written the results of segmental tibia fracture with fibula fracture 1/3 middle (Fig 2). The doctor gives action to the patient with the final diagnosis in the patient, namely open fracture of the tibia fibula dextra with the secondary diagnosis of close fracture of the distal radius shaft and vulnus degloving



antebrachi sinistra. In the discharge summary form, Open Fracture Tibia Fibula Dextra was diagnosed with ICD code 10 S82.21, with secondary diagnoses of Close Fracture Distal Radius Sinistra (S52.50) and Vulnus Degloving Antebrachi Sinistra (S59.9). The action given is Open Reduction Internal Fixation Tibia Dextra with ICD code 9CM 79.36, Open Reduction Internal Fixation Radius Sinistra (79.32) and Debridement (86.22).

2.2 CASE 2

Case 2 in the emergency room with an initial diagnosis of Fracture of Forearm. In the anamnesis form, the main complaint is pain in the left wrist after a fall while playing handball and the hand cannot be moved. X-ray examination was carried out and the results showed an avulsion fracture in the os radius. During the examination in the emergency room, the patient is diagnosed early with a distal radius fracture. In inpatient services and supporting examination results, doctors diagnose the final patient with Close Fracture of Lower and Radius Sinistra.

From the preoperative form (Fig 3) the doctor decided to perform a closed repositioning action by putting a cast on the arm accompanied by anesthesia. On the discharge summary form of patients with a diagnosis of Close Fracture Lower End Radius Sinistra with ICD code 10 (S52.50) without any secondary diagnosis. Patients are given Closed Reduction Separated Epiphysis Radius Sinistra with ICD code 9 CM (79.42) and X-Ray Wrist (88.23).

2.3 CASE 3

The third case of the patient came to the bone specialist poly with complaints of injuries to the right hand after being hit by a knife 2 weeks ago. The doctor gave an initial diagnosis of the



patient having a joint strain dislocation in the foot and wrist. The doctor recommends that the patient be hospitalized for surgery on the same day. The nursing diagnosis shows the patient has acute pain. The patient is given injection therapy by the doctor. Supporting examinations such as X-rays are not performed on these patients. From the examination that has been done, the patient is diagnosed with the end of fdp rupture and fds tendon dextra. In the preoperative assessment, the doctor plans to perform tendon and vascular repair (Fig 3). On the discharge summary form, the patient was diagnosed with FDP Rupture and FDS Tendon with ICD code 10 (S82.21), Close Fracture Distal Radius Sinistra (S52.50) and Vulnus Degloving Antebrachi Sinistra (S59.9). Actions with ICD codes 9 CM Open Reduction Internal Fixation Tibia Dextra (79.36), Open Reduction Internal Fixation Radius Sinistra (79.32) and Debridement (86.22).

The image shows two medical forms. The left form is titled 'Pemeriksaan Fisik' (Physical Examination) and contains patient information, vital signs (GCS 4/5, RR 20, SpO2 99%, Suhu 36.4°C, Tekanan Darah 127/77 mmHg), and body diagrams with handwritten notes. The right form is a 'Praprocedure Report' (Pre-procedure Report) with handwritten notes and a checklist of systems.

Figure 2. Anamnesis and Praprocedure Report Case 1



Figure 2. Praprocedure Report Case 2

Figure 2. Anamnesis & Praprocedure Report Case 3

3. RESULT AND DISCUSSION

In case 1 patient admitted to the hospital due to an accident. In the 2nd case, the patient admitted to the hospital due to a post-exercise fall. In the 3rd case, the patient was admitted to the hospital due to injuries after being hit by a knife. It can be concluded that the cause of hospital admission from all cases is caused by external causes, therefore in the coding process it is necessary to add an external cause code.



External cause in ICD-10 is an additional classification used to classify possible events in an environment and circumstances as a cause of accident, injury, poisoning, or other external causes. The external cause code (V01-Y89) should be used as the primary code by which a single condition of morbidity can be classified in Chapter XIX (Injury, poisoning, and certain other consequences of external cause) [8].

In case 1 patient comes to the ER with leg pain after a motorcycle accident, the doctor diagnoses the patient with Fracture At Wrist and Hand Level. After several examinations and anamnesis, the doctor diagnosed the patient with Open Fracture Tibia Fibula Dextra. In case 2 patients came to the ER in a condition of pain in the wrist after a fall while exercising, the doctor diagnosed the patient early with a Fracture of Foream From the results of the examination that had been done the patient was diagnosed finally with a Close Fracture of the Lower and Radius Sinistra. In case 3 patients came to the poly with injuries to the right hand after the patient was hit by a knife 2 weeks ago, doctors diagnosed the patient early with joint strain dislocation of the foot and wrist. From the results of the examination that has been done, the patient is diagnosed with the end of FDP Rupture and FDS Tendon.

From the results of the study based on the accuracy of the diagnosis of the 3 files that have been studied, it was found that there was an inconsistency of doctors in providing diagnoses to patients from the beginning of the patient's entry to the patient's discharge. This is one of the obstacles for officers in providing specific codes [9]. The accuracy of diagnosis is an important component in determining the codification of the external causes of the disease in patients. Classification of diseases can be carried out

based on the pathology of the disease, causes, ways of treatment, and some other factors. This is to facilitate the process of classifying diseases referred to in ICD-10 [10].

At the University of Muhammadiyah Hospital, there is no coding of external causes or external causes of disease because officers feel that external cause codes are not really needed to make BPJS claims. So, here are the results of external cause coding in the case studied.

In case 1, the patient came to the hospital with injuries to his left arm and right leg after falling off a motorcycle. The leadterm used is accident because the events experienced by patients are classified as accidents. The first ident used is transport and the second ident used is motorcycle rider because the patient acts as a motorcycle rider. The external cause code used by V29 with the additional code point 9 as an unknown description. Another additional code is point 9 in the activity code with unknown information. The final codification used is V29.99.

In case 2, the patient came to the hospital with pain in the left arm after falling during exercise with the left arm resting on the body. The leadterm used is fall because the event experienced by the patient is a fall event. No indentation is used. The external cause code used is W19 with an additional code of point 3 as a description of the place in the sports area. Another additional code is point 0 in the activity code with a description of the event that took place during exercise. The final codification used is W19.30.

In case 3, the patient came to the hospital with a wound to his right hand due to a knife 2 weeks ago. The leadterm used is contact because the event experienced by the patient is the event that causes injury due to being hit by an object. The first ident used is with with with the second ident of the knife. The external cause



code used is W26 with an additional code of point 0 as a description of the place at home. Another additional code is point 3 in the activity code as a description of events taking place while working. The final codification used is W26.03.

In the classification of external cause codification must be complete until the fifth character, which includes category 3 the first character shows how the accident occurred, the fourth character shows the location of the incident, and the fifth character shows the patient's activity when the accident occurred [11]. In addition, ICECI (International Classification of External Cause of Injury) describes another purpose of external cause coding to assist researchers and practitioners in prevention by measuring, describing, and monitoring the occurrence of accidents and investigating how circumstances occurred at the time of the incident using internationally agreed classifications [12].

Consistent when officers code differently but the code remains the same [13]. Another factor that affects the accuracy of the code is due to unclear writing of the diagnosis [14]. Detailed, coherent event notes and standardized procedures (SPO) are recommended for precise external cause coding [15].

4. CONCLUSION

The implementation of external cause coding at the Muhammadiyah Malang University Hospital has not yet been carried out. Judging from the consistency of the diagnosis, it is still inconsistent, but this cannot be the reason for the non-implementation of external cause coding. External cause coding should still be performed with the note that the chronology of events must be coherent and complete. In order for the implementation of external cause coding to be carried out precisely and coherently, an SOP is needed as a standardization in external

cause coding. External cause coding is done to make it easier for researchers and practitioners to prevent, measure, describe, and monitor the occurrence of accidents and to investigate how things are going when the incident takes place. Additionally, it is recommended to conduct regular training for medical staff on the importance of external cause coding to improve consistency and coding quality.

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7. CONFLICT OF INTEREST

"Conflict of Interests: No relevant disclosures".

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