



Accuracy of Neoplasm Code Diagnosis at Surgery Hospital, Padang

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Abstract : Medical records are important part of hospital administration. One of medical record management activities includes assembling, coding, indexing and filing. The results of examination in the form of a diagnosis will be coded. Coding is one part of the medical record installation related to the coding of diagnoses and actions. Accuracy diagnosis code in medical record is responsible for hospital medical bills. Accurate codes are essential for hospital financial data. Neoplasma code is one of the most common cases in surgical hospitals. This study aims to determine the accuracy of neoplasm code in the Padang surgical hospital. This research was conducted in August-November 2021. This study used a descriptive method with a qualitative approach. Population is all data abstraction of medical record files for neoplasms in 2020. Samples of neoplasms were 60 cases on summary form of inpatient medical records. Data collection using simple random sampling technique. Variable was the accuracy of diagnosis code for neoplasm cases based on ICD-10. Accuracy code is accuracy code based on ICD-10 by coder in medical record document. The results showed that 54% of the neoplasm codes were accurate based on ICD-10.

IndexTerms - Coding, ICD-10, Neoplasma.

I. INTRODUCTION

Medical records are an important part of hospital administration (Grabner, 2013). According to PMK No. 269 of 2008 concerning medical records, medical records are files containing notes and documents about patient identity, examination, treatment, action, and other services that have been provided to patients. Based on the Law of the Republic of Indonesia No. 36 of 2014 concerning Health Workers, that health workers in carrying out their professional duties are obliged to create and maintain medical records. Management of correct, good and quality medical records can be one of the important non-operational aspects that support the maintenance of the quality of health services in hospitals. The important thing that must be considered by medical recorders in maintaining the quality of medical record documents is the completeness of medical information related to the patient's disease history.

One of the medical record management activities includes assembling, coding, indexing and filing. The results of the examination in the form of a diagnosis will be coded (Module, et al, 2012). Coding is one part of the medical record installation related to the coding of diagnoses and actions. The accuracy of the diagnosis code in the medical record is responsible for hospital medical bills. Accurate codes are very important for hospital financial data (Korb, et al, 2016). Accurate disease diagnosis coding process is carried out based on ICD-10. ICD-10 is a reference in the coding process for various diseases with chapters divided into 22 chapters, including one chapter in ICD-10 discussing diseases related to neoplasms. Neoplasm is a disease of cell growth. Neoplasms consist of new cells that have different shapes, properties, and criteria from the original normal cells. In observing complex cases, complex actions and sequences of treatment are needed so that a more specific disease code is needed in order to describe the condition of the disease in detail/completely (Dewa Gede, 2000). Neoplasm coding must be precise to produce accurate morbidity information, while in the field there are still incomplete and inaccurate coding activities for neoplasm cases (Sukardja, 2000). Based on this, this study aims to determine the accuracy of neoplasm code at the Padang City Surgery Hospital

II. RESEARCH METHODOLOGY

This research was conducted at the Surgical Hospital, Padang City in August-November 2021. This study used a descriptive method with a qualitative approach. The population of this study is all data abstraction of medical record files for neoplasms in 2020. The number of samples is 60 medical records of neoplasm cases on the summary form of entry and exit and data collection using simple random sampling technique. The research variable was the accuracy of the neoplasm case diagnosis code based on ICD-10 from the abstraction of inpatient data. The accuracy of the diagnosis code is the accuracy of giving a diagnosis code based on ICD-10 by the coder officer on the medical record document by examining the results of the diagnosis written by the doctor and

the treating medical personnel. Code accuracy was assessed using ICD-10 volume 3 and volume 1. The total number of accurate neoplasm diagnostic codes will be presented and compared with inaccurate codes.

III. RESULTS AND DISCUSSION

3.1 Analysis of the accuracy of the diagnostic code in cases of fracture based on ICD-10

In this study, the coding accuracy was observed based on the ICD-10. The International Classification of Diseases (ICD) has become the standard diagnostic classification for epidemiological and health management purposes, and has been subjected to continuous update and revision. The current version, ICD-10, was introduced in 19934.

Table 3.1: Analysis of the accuracy of Neoplasma code based on ICD-10

No	Diagnosis	Code from medical record	ICD-10 code	Accuracy review
1	Adeno cancer prostat	C61	C61	Accurate
2	benign neoplasma of breast dextra	D24	D24	Accurate
3	benign neoplasma of breast dextra	D24	D24	Accurate
4	benign neoplasma of breast dextra	D24	D24	Accurate
5	benign neoplasma of breast sinistra	-	D24	Not accurate
6	benign neoplasma of breast sinistra	D24	D24	Accurate
7	benign neoplasma of breath (d)	D24	D24	Accurate
8	benign neoplasma of breath (d)	D24	D24	Accurate
9	benign neoplasma of breath (d)	D24	D24	Accurate
10	benign neoplasma of breath (d)	-	D24	Not accurate
11	benign neoplasma of breath (d)	D24	D24	Accurate
12	Cancer mammae dextra	C50.1	C50.9	Not accurate
13	Cancer mammae dextra std III B	C50.1	C50.9	Not accurate
14	Cancer mammae dextra std III B	C50.1	C50.9	Not accurate
15	Cancer mammae dextra std III B	C50.1	C50.9	Not accurate
16	Cancer mammae sinistra std II B	C50.2	C50.9	Not accurate
17	Cancer mammae sinistra std III B	C50.1	C50.9	Not accurate
18	Cancer mammae sinistra std III B	C50.1	C50.9	Not accurate
19	Cancer mammae sinistra std III B	C50.1	C50.9	Not accurate
20	Cancer mammae sinistra std IV	Z51.5	C50.9	Not accurate
21	Cancer mammae bilateral	C50.9	C50.9	Not accurate
22	Cancer mammae bilateral (metastasis)	C78.0	C50.9	Not accurate
23	Cancer mammae stadium IIIB	C50.1	C50.9	Not accurate
24	Cancer mammae stadium IIIB	C50.1	C50.9	Not accurate
25	Cancer mammae sinistra stadium II	C50.2	C50.9	Not accurate
26	Cancer mammae sinistra stadium II	C50.5	C50.9	Not accurate
27	Cancer mammae sinistra stadium III B	-	C50.9	Not accurate
28	Cancer mammae sinistra stadium IIIB	C50.1	C50.9	Not accurate
29	Cancer mammae sinistra std IIB	C50.4	C50.9	Not accurate
30	Cancer of thyroid gland	C73	C73	Accurate
31	Cancer of rectum	K62.1	C20	Tidak Akurat
32	Cancer of rectum	C20	C20	Accurate
33	Cancer of rectum	C20	C20	Accurate
34	Cancer of rectum	C20	C20	Accurate
35	Cancer skin of lower limb	C44.7	C44.7	Accurate
36	carcinoma of tongue	C02.9	C02.9	Accurate
37	Cyst lobular auricula (D)	D23.2	D23.2	Accurate
38	neoplasma of pedis	-	D36.7	Not accurate

No	Diagnosis	Code from medical record	ICD-10 code	Accuracy review
39	neoplasm of thyroid gland susp malignat	D34	D34	Accurate
40	neoplasma of thyroid gland	-	D34	Not accurate
41	neoplasma of thyroid gland	D34	D34	Accurate
42	neoplasma of thyroid sinistra	D34	D34	Accurate
43	skin tumor susp fibrolipoma at lingual sinistra	-	D23.9	Not accurate
44	Soft tissue tumor femur dextra	D21.2	D21.2	Accurate
45	soft tissue tumor regio femur	D21.0	D21.2	Accurate
46	STT extra cranial	-	D21.0	Not accurate
47	stt Regio cruris dextra	D21.2	D21.2	Accurate
48	stt regio dextra auricula	-	D21.0	Not accurate
49	stt regio gluteal	D21.5	D21.5	Accurate
50	STT regio back susp limfoma	D21.6	D21.6	Accurate
51	stt ear (s)	D21.0	D21.0	Accurate
52	STT pada paha kanan susp fibrolifoma	D21.2	D21.2	Accurate
53	susp cancer hyroid	C73	C73	Accurate
54	Benign neoplasma of skin mamae sinistra with haemorrhage	D23.5	D23.5	Accurate
55	Benign neoplasma of mamae dextra	D24	D24	Accurate
56	Benign neoplasma of mamae sinistra	-	D24	Not accurate
57	Benign neoplasma of mamame bilateral	-	D24	Not accurate
58	Benign neoplasma of parotis (d)	D11.0	D11.0	Accurate
59	Benign neoplasma of parotis dextra	D11.0	D11.0	Accurate
60	Benign neoplasma of skin breast	D24	D24	Accurate

Table 3.1 shows the results of the accuracy of the neoplasm code at surgery hospital, Padang from 60 medical records, 32 codes (54%) of neoplasm codes were accurate according to the coding on ICD-10, while 28 (46%) codes were inaccurate. Of the 32 inaccurate codes, 10 neoplasm codes were not filled in the medical record entry-exit summary form.

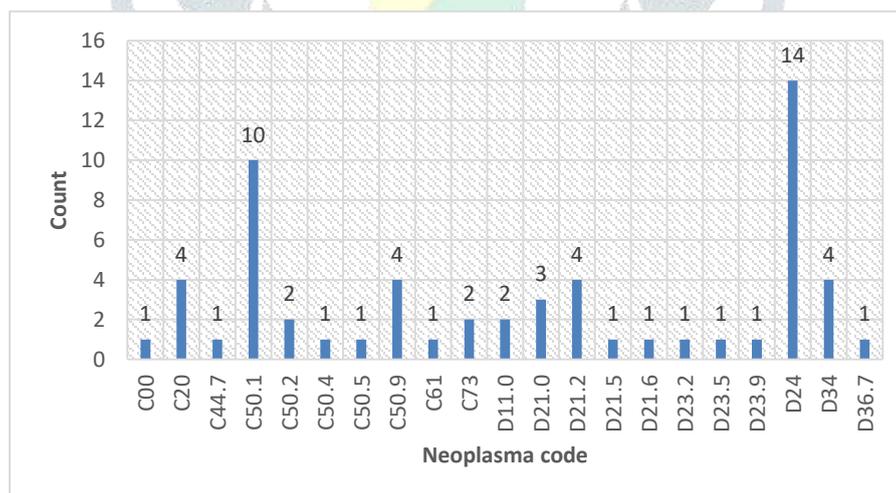


Figure 3.1. Distribution of neoplasm code based on ICD-10

The distribution of the most cases (Figure 3.1) was coded D24 (Benign neoplasm of breast) as many as 14 cases, followed by code C50.1 (Malignant neoplasm of Central portion of breast) with 10 cases of neoplasm. Based on the nature of the division, the neoplasm code consisted of 27 cases of malignant neoplasm and 33 cases of benign neoplasm.

Discussion

The results of the accuracy of the neoplasm code at the surgical hospital, Padang, from 60 medical records, 32 codes (54%) of neoplasm codes were accurate according to the coding on ICD-10, while 28 (46%) codes were inaccurate. Of the 32 inaccurate codes, 10 neoplasm codes were not filled in the medical record entry-exit summary form. The breast cancer coding did not explain the position of the cancer based on the anatomy, while the breast cancer code or malignant neoplasm of breast (C50.-) was coded based on the mammary anatomy (Table 3.1).

While the provisions in classifying diseases using the ICD are determining the diagnosis code for neoplasms, there are 2 codes, namely topographic codes and morphological codes. These two codes are very important, because the topographic code is a code that indicates the location of the neoplasm, while the morphological code is a code that indicates the nature of the neoplasm (Setyorini, et al 2013). According to Johanna Christy, et al (2019), the factors that affect the accuracy of the neoplasm code are the understanding of different coders in determining the code and due to the absence of anatomical pathology examination results, it is difficult for the coder to know the nature of the neoplasm in question. According to Anita Maharani, et al (2020) the factors that affect the accuracy of the neoplasm code are unclear or unreadable writing and the lack of accuracy of the coder in coding the neoplasm diagnosis.

According to Irmawan, et al (2014) the completeness of filling in information related to the diagnosis of neoplasms also affects the accuracy of the code, so if the information is incomplete the code will also not be accurate. Meanwhile, according to Hatta (2013) determining the diagnosis of a patient is the obligations, rights, and responsibilities of the doctor (medical personnel) involved, so that the diagnosis contained in the medical record is filled out completely and clearly according to the directions in the ICD-10 book. The absence of anatomical pathology lab results also affects the accuracy of the neoplasm code as described by Johanna Christy, et al (2019) where it is known that to code morphology in neoplasms, information is needed that supports knowledge about the nature of the neoplasm experienced by the patient. Morphological code will not be accurate. The accuracy of the neoplasm code is also influenced by the quality of the coder, each officer has different abilities in interpreting the diagnosis, differences in accuracy and workload that will affect the coding results later. According to the Ministry of Health (2006) the main key to the implementation of coding is the coder or coding officer. Coding accuracy (determination of codes) is the responsibility of medical records personnel, especially coding personnel. Knowledge of coding procedures and provisions in ICD-9 CM and ICD-10 will enable coders to determine codes more precisely.

IV. CONCLUSION

There are 54% of the neoplasm codes were accurate based on ICD-10

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