Article

Factors Associated with Inaccurate Inpatient Diagnosis Code at Health Information System Ibnu Sina Hospital Gresik Regency

Khumaidah Hasan [1*], Maya Weka Santi [2], Ervina Rachmawati [2], Dony Setiawan [2]

[1] Health Information Management , Politeknik Negeri Jember, Mastrip Street PO BOX 164, Jember, Indonesia; idahasan85@gmail.com

[2] Health Information Management , Politeknik Negeri Jember, Mastrip Street PO BOX 164, Jember, Indonesia; mayaweka@polije.ac.id

[3] Health Information Management , Politeknik Negeri Jember, Mastrip Street PO BOX 164, Jember, Indonesia; ervina_rachmawati@polije.ac.id

[4] Health Information Management , Politeknik Negeri Jember, Mastrip Street PO BOX 164, Jember, Indonesia; doni_shp@polije.ac.id

* Correspondence: idahasan85@gmail.com ; Tel.: 081335588991

Abstract: Inaccuracies in disease diagnosis codes result in inaccurate reports. The results of the preliminary study showed a high rate of code inaccurate (73%). The research aimed to determine the relationship between ability, leadership, reward, motivation and attitude factors on inaccurate inpatient diagnosis codes at HIS Ibnu Sina Hospital, Gresik Regency. This research method uses a cross-sectional approach with the chi-square test. The population used was nurses who coded diagnoses as many as 42 people with a sample of 39 people. The results of observations of inaccurate inpatient diagnosis codes at HIS Ibnu Sina Hospital, Gresik Regency were 49% inaccurate. The results of the attitude factor analysis have a relationship with the inaccurate of inpatient diagnosis codes with P value $0.00 < \alpha$ (0.05), while the Ability, Leadership, Reward, and Motivation there is no significant relationship with inaccurate inpatient diagnosis codes with P value $> \alpha$ (0.05) at Hospital Information System Ibnu Sina Regional Hospital, Gresik Regency. The suggestion this research is the Hospital Director needs to create a policy regarding the diagnosis input must be carried out by medical recorders, a clear reward and punishment mechanism, monitoring and evaluation by audit team for the number of inaccurate disease diagnosis codes.

Keywords: Diagnosis, Inaccurate, Code, Hospital Information System

1. Introduction

Medical records are documents that contain patient identity data, examinations, treatment, procedures, and other services that have been provided to patients [1]. Medical record services are defined as professional support service activities oriented towards health information for health service providers and other interested agencies based on medical record technology knowledge [2]. The quality of health information is determined by the data processing system and data processing is determined by the performance of officers as data processors and the accuracy of reports as a benchmark for decision-making.

Ibnu Sina Hospital Gresik Regency is a type B educational hospital. Based on the results of a preliminary study in January 2023 using data from 100 patients who had been discharged from hospital, the following results were obtained in Table 1.

Table 1. Inaccurate in filling in room diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency.

Date	Number of Inpatient Medical Records	Code Inaccurate			
		Accurate	(%)	Inaccurate	(%)
16/01/2023	23	6	26%	17	74%

Date	Number of Inpatient Medical Records	Code Inaccurate			
		Accurate	(%)	Inaccurate	(%)
17/01/2023	26	8	31%	18	69%
18/01/2023	17	5	29%	12	71%
19/01/2023	16	4	25%	12	75%
20/01/2023	18	4	22%	14	78%
Total	100	27	27%	73	73%

Table 1 illustrates that the inaccurate in inputting room diagnosis codes is very high, namely 74 (74%) diagnoses which affect the accuracy of reporting data. This condition is proven by the difference in data on the top 10 diseases for the period December 2022 before and after the diagnosis code was verified by the coder in the insurance department. Calculus of kidney (N20.0) was the number 1 disease in December 2022 before the coding was verified by the coder in the insurance section, but after being verified by the coder in the insurance section, the number 1 disease in December 2022 was Non-insulin-dependent diabetes mellitus without complications (E11 .9). This statement is in line with the results of previous research which states that discrepancies in the main diagnosis codes in the HIS and medical record files are very important because if the level of discrepancy is high it will have an impact on inaccurate disease morbidity data which will affect reporting data. [3].

Gibson states that there are 3 factors that influence work and performance, namely: individual, organizational and psychological variables. Individual factors consist of abilities and skills, background and demographics. Organizational factors consist of leadership, job design, rewards, structure and resources, while psychologic factors consist of attitudes, motivation, perception, personality which ultimately influence an individual's performance [4]. The results of preliminary study observations on January 16 2023 at Ibnu Sina Hospital Gresik Regency, revealed that the person in charge of inputting diagnoses which automatically generates diagnosis codes on the HIS is not a coder (medical recorder), but rather nurses and room administration staff, this causes inaccurate diagnosis codes on the HIS. Kunianingsih stated that the coder's ability and skills are related to the accuracy of the code produced with a p value = 0.050, as well as a medical recorder's educational background and good knowledge will have a good level of coding accuracy in assigning disease codes [5] [6]. The role of organizational factors also influences officer performance, in this case the accuracy of disease diagnosis codes. A leader who has a figure that matches the expectations can make employees feel comfortable in communicating and interacting and feel appreciated, so that they can optimally carry out their duties to achieve common goals [7].

Another factor that influences a person's performance is reward. The level of satisfaction with rewards for each person is different depending on the level of a person's needs, differences in employment status which influence the amount of reward received also influence satisfaction with the form of reward received so that reward factors will also influence a person's performance, in this case the accuracy of the diagnosis code on the HIS [8]. Motivation has a very positive influence on performance results. Motivation has an important role in an employee, with motivation an employee is expected to be willing to work hard and be enthusiastic in achieving high work productivity [9]. Based on the description above, the researcher aims to conduct research on factors related to inaccurate inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency.

2. Materials and Methods

This research was conducted at Ibnu Sina Hospital, Gresik Regency for 13 months in January 2023 - February 2024. This type of research is quantitative research with a cross sectional approach. The population in this study was 42 nurses in charge of each shift. The

sample in this study was 39 nurses. The sampling technique used is simple random sampling. Simple random sampling is used because there are inclusion criteria applied to determine the sample in this study, which are respondents who are either nurses or head nurses in each ward. There are two data analysis techniques used, namely univariate and bivariate. The bivariate analysis used in this research is the chi-square test to analyze the relationship between the variables studied which have a significant relationship or correlation. This study has received ethical approval from the Research Ethics Committee of the Politeknik Negeri Jember with the numbers 1471/pl17.4/PG/2023.

3. Results

3.1. Identification of Ability, Leadership, Reward, Attitude and Motivation Factors regarding Inaccurate Inpatient Diagnosis Codes at HIS Ibnu Sina Hospital Gresik Regency

Each variable is categorized based on the criteria from each indicator, which are assessed using an ordinal scale. Scoring is done starting woth the highest value of 4 (very capable) and 1 (very incapable). Categorization is based on maximum score according to the number of criteria for each indicator in the questionaire, resulting in categories such as not good, not so good, good, and very good. An overview of the identification of several factors by inpatient nurses regarding the inaccurate of inpatient diagnosis codes in HIS at Ibnu Sina Hospital Gresik Regency in 2024 can be seen in Table 2.

Table 2. The results of the analysis of the description of each factors regarding inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency.

Factors	Analysis Result	
	n	**%**
Ability		
Not good	0	0
Not so good	10	26
Good	29	74
Very good	0	0
Leadership		
Not good	0	0
Not so good	3	8
Good	23	59
Very good	13	33
Reward		
Not good	0	0
Not so good	11	28
Good	28	72
Very good	0	0
Attitude		
Not good	13	33
Not so good	0	0
Good	26	67
Very good	0	0
Motivation		
Not good	8	20
Not so good	5	13
Good	26	67
Very good	0	0

Based on table 2, it is known that the assessment of a nurse's coding ability regarding inaccuracies in inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency is that the ability of a nurse is in the good category is 74%. The leadership assessment factor of a head of the room by the nurse is in the good category is 59%. The reward assessment obtained regarding the inaccurate of inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency was in the good category is 72%. The assessment of the attitude of nurses in carrying out their duties regarding the inaccurate of inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency is in the good category is 67%. Finally, the assessment of the motivation of nurses in carrying out their duties regarding the inaccurate of inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency is in the good category is 67%.

3.2. Relationship between Ability Factors and Inaccurate of Inpatient Diagnosis Codes at HIS Ibnu Sina Hospital Gresik Regency

The results of the analysis of the relationship between ability and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency can be seen in Table 3.

Table 3. The results of the analysis of the relationship between ability and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency

Ability Factors		Inaccurate Diagnosis Code				Amount	P value
		Accurate		Inaccurate			
		n	%	N	%		
Ability	Not So Good	3	30	7	70	100%	
Grade	Good	17	59	12	41	100%	**0,155**
Total		**20**	**49**	**19**	**51**	**100%**	

The results of hypothesis testing using the chi-square test between the ability of inpatient nurses and the inaccuracy of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency the Exact Sig value was 0.155, it means that there is no relationship between the ability of inpatient nurses and the inaccuracy of inpatient diagnosis codes. Based on table 3 above, as many as 29 nurses had good skills but it was still found that 12 people were coding the diagnosis inaccurately, as many as 17 people were coding the diagnosis accurately.

3.3. Relationship between Leadership Factors and Inaccurate of Inpatient Diagnosis Codes at HIS Ibnu Sina Hospital Gresik Regency

The results of the analysis of the relationship between leadership and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency can be seen in Table 4.

Table 4. The results of the analysis of the relationship between leadership and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency

Ability Factors		Inaccurate Diagnosis Code				Amount	P value
		Accurate		Inaccurate			
		n	%	N	%		
Leadership	Not So Good	1	33	2	67	100%	
Grade	Good	13	57	10	43	100%	**1,000**
	Very Good	6	46	7	53	100%	
Total		**20**	**51**	**19**	**49**	**100%**	

The results of hypothesis testing using the chi square test between the leadership of inpatient nurses and the inaccuracy of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency the Exact Sig value was 1.000, it means that there is no

relationship between the ability of inpatient nurses and the inaccuracy of inpatient diagnosis codes. Based on table 4 above, as many as 23 nurses had a good level of leadership and were able to code diagnoses accurately and 10 people coded inaccurately. At the very good leadership level, 6 people did the coding accurately, but there were still 7 nurses who did the coding inaccurately.

3.4. Relationship between Reward Factors and Inaccurate of Inpatient Diagnosis Codes at HIS Ibnu Sina Hospital Gresik Regency

The results of the analysis of the relationship between reward and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency can be seen in Table 5.

Table 5. The results of the analysis of the relationship between reward and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency

Reward Factors		Inaccurate Diagnosis Code				Amount	P value
		Accurate		Inaccurate			
		n	%	N	%		
Reward	Not So Good	3	30	7	70	100%	
Grade	Good	17	59	12	41	100%	**0,541**
Total		**20**	**51**	**19**	**49**	**100%**	

The results of hypothesis testing using the chi square test between the reward of inpatient nurses and the inaccuracy of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency the Exact Sig value was 0.541, it means that there is no relationship between the ability of inpatient nurses and the inaccuracy of inpatient diagnosis codes. Based on table 5 above, as many 28 nurses had a good reward level, 13 people could do coding accurately and 15 people did inaccurate coding. The better the reward level, the more nurses could do coding accurately.

3.5. Relationship between Motivation Factors and Inaccurate of Inpatient Diagnosis Codes at HIS Ibnu Sina Hospital Gresik Regency

The results of the analysis of the relationship between motivation and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency can be seen in Table 6.

Table 6. The results of the analysis of the relationship between motivation and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency

Ability Factors		Inaccurate Diagnosis Code				Amount	P value
		Accurate		Inaccurate			
		n	%	N	%		
Leadership	Not Good	0	0	8	100	100%	
Grade	Not So Good	3	60	2	40	100%	**0,063**
	Good	17	65	9	35	100%	
Total		**20**	**20**	**51**	**19**	**49**	

The results of hypothesis testing using the chi square test between the motivation of inpatient nurses and the inaccuracy of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency the Exact Sig value was 0.063, it means that there is no relationship between the ability of inpatient nurses and the inaccuracy of inpatient diagnosis codes. Based on table 6 above, 26 nurses had good motivation, 17 people could

code the diagnosis accurately and 9 people coded the diagnosis inaccurately. The level of motivation was poor, as many as 3 people could code the diagnosis accurately and 2 people coded the diagnosis inaccurately. At the level of poor ability, 8 people coded the diagnosis inaccurately and there were no people who coded the diagnosis accurately.

3.6. Relationship between Attitude Factors and Inaccurate of Inpatient Diagnosis Codes at HIS Ibnu Sina Hospital Gresik Regency

The results of the analysis of the relationship between attitude and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency can be seen in Table 7.

Table 7. The results of the analysis of the relationship between attitude and inaccurate of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency

Reward Factors		Inaccurate Diagnosis Code				Amount	P value
		Accurate		Inaccurate			
		n	%	N	%		
Attitude	Not Good	0	0	13	100	100%	
Grade	Good	20	77	6	23	100%	**0,000**
Total		**20**	**51**	**19**	**49**	**100%**	

The results of hypothesis testing using the chi square test between the attitude of inpatient nurses and the inaccuracy of inpatient diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency the Exact Sig value was 0.000, it means that there is no relationship between the ability of inpatient nurses and the inaccuracy of inpatient diagnosis codes. Based on table 7 above, as many 26 nurses had a good attitude, 20 people could code the diagnosis accurately and 6 people coded the diagnosis inaccurately. There were 13 people with bad attitudes, and all of them had inaccurate coding of their diagnosis.

4. Discussion

Ability is skill, dexterity, talent, ability, energy (strength) to perform an action. Identification of the ability of inpatient nurses to inaccurate inpatient diagnosis codes at HIS of Ibnu Sina Hospital Gresik Regency includes individual capacity starting from knowing the patient's main diagnosis, understanding the main diagnosis code, fluency in medical terminology, good memory for disease diagnosis codes, and speed skills. find the disease diagnosis code according to the patient's main diagnosis. The large number of nurses who have good abilities is due to the nurses received in-house medical record training at Ibnu Sina Hospital Gresik Regency. Training has been proven to have a big influence on an officer's performance. Nugroho believes that training influences the performance of human resources, so that even though inpatient staff do not have an educational background in medical recording, nurses also have good abilities because the average nurse has received in-house training regarding medical records [10]. A nurse's work period of more than 5 years also allows nurses to become familiar with various diagnoses determined by doctors. This happens because length of service is positively correlated with employee performance [11]. Poor nursing skills occur due to the inability of nurses to understand accurate disease diagnosis codes in accordance with ICD X. Garmelia agreed with this statement that inaccuracies in diagnostic coding could have an impact on the inaccurate of the resulting code [12].

Leadership is an effort to use a type of influence without coercion (concoercive) to motivate people to achieve goals [4]. Leadership identification of inaccurate inpatient

diagnosis codes at the HIS of Ibnu Sina Hospital Gresik Regency includes a leader (room head) having a good relationship with his subordinates, explaining the work, providing guidance, direction and encouragement, attracting officers work interest, resolving conflicts at work, carry out good cooperation, provide attention, give appreciation for the achievements achieved to all subordinates. Head of the room at Ibnu Sina Hospital Gresik Regency is quite helpful in terms of achieving accuracy of room diagnosis codes. The head of the room is able to provide motivation and guidance so that the diagnosis chosen in the HIS, so that the diagnosis code is correct and accurate. Wati stated that room heads who have participative, nurturing, bureaucratic and task-oriented abilities are able to influence and direct their subordinates to carry out their duties well will be able to achieve nurse performance in the accuracy of inpatient diagnosis codes [13]. Based on observations, the head nurse cannot influence the attitudes of doctors or medical staff regarding the writing of diagnoses, the use of terms and abbreviations in disease diagnoses, which are related to the accuracy of diagnosis codes. A head nurse also cannot establish policies for doctors and medical staff regarding rewards and punishments related to diagnosis writing based on ICD-10. This indicates that the head nurse cannot influence the performance of staff in carrying out their duties. This situation arises because leaders cannot directly impact their subordinates' execution of their tasks. The head nurse cannot influence the attitudes of doctors and inpatient staff towards the accuracy of diagnosis codes because understanding the accuracy of diagnosis codes through reward and punishment policies is within the purview of the Hospital Director [14].

Reward means appreciation which is an effort to foster feelings of acceptance (recognition) in the work environment, which touches aspects of compensation and aspects of relationships between workers [15]. Identification of rewards for inaccurate disease diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency includes services received by inpatient nurses, career path, rewards and awards received, principles of justice, salary increases and other benefits received by inpatient nurses. The high opinion that compensation is good is because the average inpatient nurse has civil servant status and the salary and allowances are regulated in applicable regional regulations.

Motivation is a concept that describes the forces within employees that initiate and direct behavior [4]. Identification of motivation for inaccurate inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency includes feeling happy and comfortable with the work of inputting diagnoses that produces diagnosis codes, being confident that you can choose a diagnosis code that matches the patient's diagnosis, directly inputting if the patient has been declared home and is ready. equipped with a doctor and feel that the job of inputting diagnoses is not a workload, feel happy because this job adds insight into disease codes and believe that innovation and opportunities for achievement are open to all employees. The feeling of whether or not a nurse is happy in doing their work is a form of motivation, so if the inpatient nurse's motivation is that the accuracy of the room diagnosis code is good then this will have an impact on the accuracy of the room diagnosis code which will also be good. Nurses who feel uncomfortable with their work in entering diagnoses tend to feel irresponsible for the accuracy of diagnosis codes [16].

Work attitude is each person's emotional response to the work being done, responsibility for the work assigned, and self-confidence when working [17]. Identification of nurses' attitudes towards inaccurate inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency includes always checking the suitability of the diagnosis input with the doctor's writing, checking the suitability of the disease diagnosis with the disease diagnosis code, inputting the diagnosis written by the doctor correctly, being aware of the results the patient's diagnosis input produces. disease diagnosis code, confirm with the doctor if there is an illegibility of the disease diagnosis, be careful in choosing the disease diagnosis code, find 3 characters in the disease diagnosis code, replace the patient's main diagnosis input which does not match the patient's final diagnosis and follow scientific developments in disease diagnosis coding. Nurses' bad attitudes towards inaccurate disease diagnosis codes have an impact on nurses' lazy

attitude towards whether the results of the diagnosis input written by the doctor are in accordance with the disease diagnosis code based on ICD X [18].

Based on the results, the significance value of the ability factor (p) was 0.155. The ability of inpatient nurses is not related to the inaccuracy of inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency. The research results differ from Hastuti's research results in that there is a relationship between ability and inaccurate disease diagnosis codes with a p value of 0.05. Inpatient staff with a nursing educational background of course only have the ability to remember and be familiar with diagnoses and diagnostic coding determined by doctors, a nurse does not have specific abilities regarding the procedures for coding an illness. Inpatient nurses who do not have a medical recording educational background do not have special abilities regarding coding diseases [19]. Even though inpatient staff have good skills in understanding the patient's main diagnosis, reading the doctor's writing and finding diagnosis codes, this is because inpatient staff are only familiar with diagnoses and diagnosis codes commonly used in the room, inpatient staff do not have specific skills regarding disease codification due to the background of inpatient personnel who are not medical recorders [20].

The results of the analysis obtained a significance value of the leadership factor (p) was 1.000. The leadership factor (head of the room) of inpatient nurses is not related to the inaccuracy of inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency. Based on the observations of the head of the room, it cannot influence the attitude of a doctor or medical personnel regarding writing a diagnosis, the use of terms and abbreviations in disease diagnosis which are related to the accuracy of the diagnosis code. A head of a room also cannot make a policy for doctors and medical personnel regarding rewards and punishments for writing diagnoses based on ICD-10. This is in accordance with research which states that hospitals need to strengthen doctors' understanding and positive attitude towards the accuracy of diagnostic coding according to the ICD which is supported by a clear reward and punishment mechanism [21]. Leadership cannot influence the performance of officers in carrying out their duties. So it The head of the hospital cannot influence the attitude of a doctor and inpatient staff towards the accuracy of diagnosis codes because the one who can provide a good understanding of the accuracy of diagnosis codes through reward and punishment policies is the Hospital Director [22].

The results of the analysis obtained a significance value of the motivation (p) of 0.063. The p value is greater than α = 0.005. The motivation of inpatient nurses, such as being confident that they can choose a diagnosis code that matches the patient's diagnosis, directly inputting the patient's diagnosis if the patient has been declared home, and feeling happy because the work of inputting a diagnosis that produces a diagnosis code can increase insight is not enough to reduce the number of inaccurate disease diagnosis codes. The motivation given to officers can have an impact on improving officer performance [23]. Motivation that comes from within a person is not enough if there is no knowledge of the coding rules that are in accordance with the applicable coding rules, because the inpatient officer is not a coder but a nurse who does not have knowledge and competence in the field of coding. Previous research suggests there is a relationship between a coder's knowledge and educational background and the accuracy of diagnostic codes. The results of the analysis Sulriaeni's research with a p value of 0.015, can be concluded that the motivation of inpatient staff who do not have an educational background in medical recording is not enough to reduce the number of inaccuracies in disease diagnosis codes [24]. The results of this research are in line with Ruswitasari's research which argues that motivation has no effect on inaccurate diagnosis codes for a disease with a ϱ value of 0.056 [25].

Based on the results, a significance p value of 0.000 was obtained. Ruswitasari's research also stated that there is an influence between the officer's attitude towards inaccurate diagnosis codes with a p value of 0.010 [25]. This attitude factor is related to the inaccuracy of inpatient diagnosis codes. The better the nurse's attitude, the lower the percentage of inaccurate diagnosis codes and vice versa, the lower the nurse's attitude,

the higher the percentage of inaccurate diagnosis codes. Not checking the conformity of the disease diagnosis with the diagnosis code, being lazy about checking whether the diagnosis entered in the HIS matches what the doctor wrote or the worse the staff's attitude will also have an impact on the inaccuracy of the diagnosis code, so it can be concluded that the attitude of the inpatient staff is related to the inaccuracy of the inpatient diagnosis code at HIS Ibnu Sina Hospital Gresik Regency. Based on the results of the questionnaire, they feel lazy to check whether the diagnosis entered into the HIS matches what the doctor wrote or not, in other words, the accuracy between writing the diagnosis and what is input into the HIS is the main problem in the attitude factor, namely 70%, which is one of the causes of inaccuracy of inpatient diagnosis codes hospitalized at HIS Ibnu Sina Hospital Gresik Regency.

The inaccuracy of diagnosis codes is not only related to attitude factors, but many factors can influence the inaccuracy of diagnosis codes. Factors that influence the accuracy of diagnostic coding seen from the human element (human resources) include: completeness of medical record documents, coder accuracy and high workload. The material-machine element (facilities and infrastructure) is the quality of medical record documents and the availability of supporting facilities and communication facilities. The method elements are the availability of Standard Operating Procedures (SOP) and monitoring and evaluation of the implementation of Pertiwi's medical records [26]. Other research states that the factors that cause discrepancies and inaccuracies in inpatient diagnosis codes are human resource factors, fixed procedures, communication, methods of determining diagnosis codes, and infrastructure, namely HIS. The main diagnosis written by the doctor responsible for the service, lack of communication between the coding officer and the doctor and coding officers who are not careful in providing disease codes are also factors that cause inaccuracies in codes [27].

5. Conclusions

The results of identifying the factors Ability (74%), Leadership (59%), Rewards (74%), Attitude (67%) and motivation (67%) are good. The results of observations of inaccurate inpatient diagnosis codes at SIMRS Ibnu Sina Hospital, Gresik Regency were 51% accurate and 49% inaccurate. The analysis shows that the attitude factor is related to the inaccuracy of inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency, with a P value of 0.00, which is less than the significance level of 0.05. However, the factors of Ability (P value = 0.155), Leadership (P value = 1.000), Rewards (P value = 0.541), and Motivation (P value = 0.063) do not show a significant relationship with the inaccuracy of inpatient diagnosis codes at at HIS Ibnu Sina Hospital Gresik Regency. The results of the analysis shows that the attitude factor is related to the inaccuracy of inpatient diagnosis codes at HIS Ibnu Sina Hospital Gresik Regency, with a P value of 0.00, which is less than the significance level of 0.05. However, the factors of Ability (P value = 0.155), Leadership (P value = 1.000), Rewards (P value = 0.541), and Motivation (P value = 0.063) do not show a significant relationship with the inaccuracy of inpatient diagnosis codes at at HIS Ibnu Sina Hospital Gresik Regency. The suggestion from this research is that the diagnosis input service should be carried out by a medical recorder, not a nurse. The hospital director needs to create a policy with a clear reward and punishment mechanism regarding the accuracy of diagnosis codes in the inpatient room. The medical audit team needs to monitor and evaluate the number of inaccurate disease diagnosis codes and find solutions. Recommendations for future research are expected to expand on this study by examining other factors that affect the inaccuracy of inpatient diagnosis codes that were not investigated by the author in this study.

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