## AN ERROR ANALYSIS OF STUDENTS' WRITING ON DIABETIC CHART EXPLANATION AT THE SIXTH SEMESTER STUDENTS OF STIKES BINA USADA BALI

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#### ABSTRACT

English for specific purposes is useful to be used in some sectors like tourism, hospital, law, and so on. Especially in STIKES Bina Usada Bali, the students as the second language learner may face some errors during learning how to write the diabetic chart explanation. They hardly put the data into the chart because they do not understand the meaning and the lexical choice especially in medical English. This study aimed at identifying and classifying types and factors caused of error made by student at sixth Semester Students of Stikes Bina Usada Bali. This research uses the combination of descriptive qualitative method in collecting and analyzing the data. Descriptive analysis in form of qualitative research used as the design in this study. Then, the result is described.

Keywords: error analysis, diabetic chart, English for specific purpose

### BACKGROUND OF THE STUDY

Language is an integral part of human life. Language is needed by the people to interact and to convey the translation of the activities, thoughts and feelings. international language which is important in this globalization era is English as stated by Ramlan (1992:2-3) especially English for specific purposes which is useful to be used in some sectors like tourism, hospital, law, and so on. Moreover, the new policy which had been declared by our ministry emphasizes us to be able to comprehend at least English in order to compete with foreigners in finding good job. This condition demands us to learn more deeply English language.

This case also occured in STIKES Bina Usada Bali which is known as one of the health institution in Bali oblige their students to be highly competent in English because of their location near the tourism area and their vision to be international, therefore English is highly required as the basic skill.

The students are expected to master four skills of learning English, including writing, speaking, reading and listening. In this study, writing will be the focus of the discussion. On writing, students are

expected to be able to write any kind of text which can be beneficial for them. Writing ability is really required by the students who are being nurses after they graduated because in their workplace they should jot down their patients' identity, the treatment applied, medical record or any charts. Text which will be chosen related with medical case such as diabetes mellitus.

Diabetes mellitus chosen because of the rising number of diabetic patient nowadays. Bad life style is one of causing diabetes suffered by people especially in Bali. People commonly eat junk food, fast food, soft drink, alcohol and they do not limit the consumption. As the result some of them do not realize that they have high blood glucose level. Especially in Bali which is known as an international area, the development of international hospital is growing rapidly. The requirement of competent medical staffs who are expert in foreign language particularly English also increase. Based on that case, the student of Stikes Bina Usada got English for specific purposes for facing the globalization era and they can compete in English.

The difficulties of students in writing diabetic chart explanation sometimes bring some errors. They hardly put the data into the chart because they do not understand the meaning and the lexical choice especially in medical English besides grammar.

Based on the explanation above, some problems can be formulated as follows: types of error made by students in writing and also factors caused the error. The benefit of this research for student is they are expected in understanding English for nursing. They can improve their vocabulary and grammar also in four basic aspects in English that speaking, writing, listening, and reading. After getting that skill they compete for working in International workplace. Besides, this research is expected to be lecturer's reference material in teaching process particularly in ESP for nursing. The output of this research is scientific publication in local journal with ISSN and

#### LITERATURE REVIEW

module enrichment.

Literature review contains some parts such as: empirical review which will be done by reviewing previous studies, which concern about error analysis, will be reviewed to understand how they bring the matters into analysis. Besides, there are also reviews of journal which can support the analysis of this study. The next one is theoretical review is several concepts related with error analysis and diabetic chart.

## EMPIRICAL REVIEW

There are some relevant previous studies which had been done about error analysis. These three studies give some contributions to this study, they are: The first is under graduate thesis of Herlina (2009) entitled "An analysis of student' errors in writing sentences". This study was done through class action research in second year student of SMP Cendrawasih 1 Jakarta. That study analyzed the error made by student in writing sentence, those are structure errors and tenses error.

The second is a journal with title "An Error Analysis Sentence Structure nn Transtool's Indonesia Into English Translation" of Endang Suciati (2010). That study analyzed about the result of Trans Tool as the TL (Target Language), the correct sentence structures according to English rules, the classification or errors and interpretation of the cause of errors by that program.

#### THEORETICAL REVIEW

Some concepts related to the topic of this study can be described in order to make enlightenment for the reader about what actually the study was about.

#### ERROR ANALYSIS

The facts of learner do makes error and that these errors can be observed, analyzes, and classified to reveal something of the system operating within the learner, led to a surge of study of learners' errors, called error analysis" (Brown, 219:2018). Besides, Harmer (138:2007) said that errors are part of student interlanguage that is the version of the language which a learner has at any one stage of development, and which is continually re-shaped as he or she aims toward full mystery; it is a natural process of language learning that student makes error when in writing English. The student hopefully can develop their knowledge from their errors. When the learner made errors, the teacher helped to correct. It can help the teacher to give information whether the language learning process is successful or

In the learning process the learner possible do errors and it caused by many factors. Hubbard wrote three major causes of error there are mother tongue interference, overgeneralization, errors encouraged by teaching material of method.

## a. Mother tongue interference

Although young children appear to be able to learn a foreign language quite easily to produce new sound very effectively, most of older learner experience considerable difficulty. The sound system (phonology) grammar of the first language imposes themselves on the new language and this leads to a foreign pronunciation, faulty grammatical patterns and occasionally the wrong choice of vocabulary.

## b. Overgeneralization

The mentalist theory claims that errors are inevitable because they reflect various stages in the language development of learner. It claims that learner process new language data in his mind and produces rules for its production based on the evidence.

c. Error encourage by teaching material or method

Error in second language may appear to be inducing by the teaching process itself. Error

is evidence of failure of ineffective teaching or lack of control. If material is well chosen meticulous care, there should never be any error. However, it might be salutary for us to be bear in mind be possibility of some of our students' errors being due to our own teaching.

To summarize up this study provided of the explanation about theoretical framework relate the study. Writing definition is one of language ability. It determines expressing idea, opinion, concept and feeling. Commonly, the tense is one of error indicator in writing because English has 16 tenses. It used to report of state or activity which happen in past, present or future times. Besides, punctuations, spelling, grammar and lexical choice are factors influence errors.

## **Diabetes Mellitus**

### A. Definition

Diabetes Mellitus is a cluster of heterogeneous disorders which being signed by the increasing of blood glucose level or more known as hyperglycemia (Brunner dan Suddarth, 2002). Besides, diabetes mellitus is a group of symptoms which appear to somebody that being caused by the increasing of blood glucose level as the result of insulin deficiency in spite of absolute or relative (Arjatmo, 2002).

## B. Epidemiology

Diabetes Mellitus more often happened to adult (up to 65 years old) than teenagers and children, especially in DM type 2. In addition, the risk of DM also increases if somebody has a family history with diabetic mellitus and obesity.

## C. Etiology

## 1) Diabetes type 1

## a. Genetic factor

A patient with diabetic does not be hereditary of it, but descend a causes or genetic tendency into DM type 1. This genetic tendency is being found in somebody who has HLA *human leucosite antigen*) antigen. HLA is a gene cluster which has responsibility of transplantation antigen and the other immune process.

## b. Immunological factors

There is an autoimmune response which is an abnormal response where antibody is being directed to normal body tissue by reacting to that tissue which being appeared as a foreign tissue, such as autoantibody to cells of Langerhans Island an endogenous insulin.

### c. Environment factor

Virus or certain tocsin could trigger autoimmune process that make a destruction of beta cell.

## 2) Diabetes Type 2

A correct mechanism that could causes insulin resistance and disorder of insulin secretion to diabetic type 2 still have not found yet. Genetic factors have an important role in the process of insulin resistance happen.

#### Risk factors:

- a. Age (insulin resistance is lean increasing in age more than 65 years old)
- b. Obesity
- c. Family history (Corwin, 2001)

## D. Clinical Manifestation of DM

- 1) Polyurine (the increasing of urinate)
- 2) Polydypsia (the increasing of thirsty)
- 3) Tired feeling and muscle weakness as the result of protein catabolism in the muscle and disability of a number of cells for glucose use as energy. The disorder of blood flow which can be found in an old diabetic, it also can causes the weakness.
- 4) Polyphagia (the increasing of hungry feeling) as the result of a condition with chronic post absorbance, protein and fat catabolism, and relative starvation of cells. And it will happen decreasing of body weight.
- 5) The raising of infection level as the result of high glucose concentration in mucous secretion, immune function disorder, and decreasing of blood flow in chronic diabetic.

### E. Classification

## 1) Diabetes Mellitus type 1

There are 2 forms of this disease such as autoimmune and idiopathic, where we can find the damage of beta cell and causes an absolute insulin deficiency. Some of diabetic type 1 are being caused by unclear factors (idiopathic), but at them we can see

insulinopeny without immune manifestation, and very easy to get ketoacidosis.

### **Medical Chart**

Medical chart is chronological written account of a patient's examination and treatment that includes the patient's medical history and complaints. physician's physical findings, the results of diagnostic tests and procedures, and medications and therapeutic procedures. Besides, according to Mobys (35:2008) medical chart is the portion of a patient's health record that is prepared by physicians and is a written or transcribed history of various illnesses or injuries requiring medical care, including inoculations, allergies, treatments, prognoses, health information frequently about immediate family, occupation, and military service. Term can also be used by dental offices and clinics.

## METHOD AND TECHNIQUE OF COLLECTING DATA

The data collected in this study in some steps or procedures in order to obtain appropriate and sufficient data for this study. The method used in this study is qualitative method. Qualitative method in this study relates to the technique of collecting data by using documentation and note-taking technique. Documentation means how to find the details of something needed to support the analysis of this study. In this case, the method of collecting data that is used in this research is direct observation method. The researcher conducted direct observation in order to obtain the data. According to Sudaryanto (1993:30), there were some steps of collecting data based on observation research as follows:

- 1. Observe and select the class and teaching staffs during a month.
- 2. Observe and noted the teaching method and the activity of student in classroom.
- 3. Give student a diabetic case, the Diabetic Chart form, ask student to filling it then write the explanation of Diabetic Chart.
- 4. Ask the difficulty experienced by students.
- 5. Data collected, analyzed the data ( types of error, the made by students in writing and the factor cause the error analyzed).

## Population and Sample Population

Population is the total member of research subject (Arikunto, 2010:173). The population of this study was the entire sixth semester students of STIKES Bina Usada Bali in 2015 which consists of five classes, they are VIA ,VIB, VIC, and VID. The number of population are 136 students.

#### Sample

Sample is a part of population which investigated (Arikunto, 2010:174). The sample of this study was class A student because from their score in the previous semester was lower than class B. Therefore, this class was chosen as the sample of study in order to investigate their error and factor causes this error. The number of sample used was 16 students.

The sample taken by using purposive sampling which means that the data taken from the students had been chosen intentionally because of the certain feature of the sample itself, in this context is error analysis. The purposive sampling which had been done in this study done by selecting fifteen tasks of the students.

#### Location

This study will be carried out in STIKES Bina Usada Bali on Jl. Kubu Gunung Tegal Jaya Badung. This place was chosen as the research location because it was one of the health institutions in Bali which promote itself being international by emphasizing the students to put highly English as their additional skill in order to find a good job and go abroad.

2.6 Operational Definition

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N	Variabl	Operational	Goal
О	e	Definition	
1.	Error	A method	Know the
	Analysi	used by the	percentag
	S	teacher to	e of
		document	students'
		the	error and
		systematic	the factor
		error made	cause the
		by student	error.
		in learning	
		second	
		language	
		acquisition	
		including	
		omission,	
		over	

		generalizati	
		on, error	
		encourage	
		by teaching	
		material or	
		method.	
2.	Diabati	The record	Know
	c	of patient	how to
	Chart:	health	explain
		condition	the chart
		after being	in written
		examined	expressio
		by the	n.
		nurse. The	
		purpose of	
		this chart is	
		to explain	
		about the	
		treatment	
		and action	
		implemente	
		d to the	
		patient	

## RESEARCH METHOD Research Design

The design of this study is descriptive analysis in form of qualitative research. The qualitative research is analyzed on students' errors in writing and explaining diabetic chart at sixth semester students in written form. It means interpretation of content which is done and arranged systematically.

## **Technique of Analyzing Data**

This research used the descriptive qualitative method in analyzing the data. Descriptive statistical technique has a function to classify data into each group from the random one until they can be interpreted. Descriptive qualitative technique is used to describe some errors made by the students.

#### DISCUSSION

In order to get comprehensive understanding of error in writing diabetic chart by sixth semester students of STIKES Bina Usada Bali. Some theories in analyze the problems are applied as follows:

# The types of error made by student in writing Diabetic Chart Explanation

Types of grammatical error in writing Diabetic Chart explanation described below:

## a. Punctuation

Punctuation is an aspect that is needed in writing a text by student. If there is punctuation error on the text, difficult to

reader in understanding the text. Some punctuations error can be described on the table below.

Student's	Error	Corrections
name		
VIC12	On May 2 <sup>nd</sup>	On May 2 <sup>nd</sup>
	2016, he	2016, he
	checked the	checked the
	blood glucose	blood glucose
	at <u>7.30 am He</u>	at 7.30 am.
	had 2,2 that is	The result
	hypoglycemia.	was 2,2 meant
		hypoglycemia
VIC29	2 <sup>nd</sup> may 2009	2 <sup>nd</sup> may 2009
	at 07.30 am	at 07.30 am
	Mr. Kingston	Mr. Kingston
	have 2,2 is	have 2,2 is
	low blood	low blood
	sugar because	sugar because
	Mr. Kingston	Mr. Kingston
	cant consume	can't
	anything.	consume
		anything.
VIC18	<b>at</b> 12.30 pm	<b>At</b> 12.30 pm
	mr Kingston	Mr. Kingston
	check the	checks the
	blood sugar	blood sugar
	and the result	and the result
	is 6.3 that is	is 6.3 means
	normal.	normal.

Based on the table above, some student ignores the punctuation function. For example, student VIC2 writes "On May 2<sup>nd</sup> 2016, he checked the blood glucose at 7.30 am He had 2,2 that is hypoglycemia". The full stop is needed after "7.30 am" indicate the complete sentence. Then, sentence of student VIC29, "cant" should be added with apostrophe (') indicate the abbreviation cannot it becomes "can't". Last is Student VC18 writes, "at 12.30 pm mr Kingston check the blood sugar and the result is 6.3 that is normal". Letter a in word "at" should be capital as the beginning of sentence.

## b. Spelling

In writing a text, writer needs to check the spelling especially in this case writing English words. If there is error spelling, word has different meaning and it doesn't has meaning. Related to this topic, there are some errors spelling in writing explanation Diabetic Chart by the student as follows:

Student's name	Error	Correction
VIA35	In the morning	In the

	the bgl is normal because the patient got the good sleep before and than before luch the bgl is normal too. the in evening at 17.00 he got hyphoglycemi a, he felt pain in his foot so he don't get enough test before.	morning the bgl is normal because the patient had a good sleep before and then before lunch the bgl is normal too.  Then in evening at 17.00 he got hypoglycemi a, he felt pain in his foot so he don't get enough test before.
VIA30	At 12.30 Mr. Kingston <b>chek</b> the <b>blod</b> sugar was 10.6.	At 12.30 Mr. Kingston checks the blood sugar was 10.6.
VIA8	At 17.00 pm he had 3,2 mmols glucose level low becaus before diner and 21.00 pm he had 8.3 mmols glucose level high maybe coz not got insulin	At 17.00 pm he had 3,2 mmols glucose level low because before dinner and 21.00 pm he had 8.3 mmols glucose level high maybe coz not got insulin

Word "than" is written by student VIA35 in the sentence above should be change into "then". Change letter "a" into "e". Both words have different meaning. Student wants to use "then" as the conjunction not for comparing. Then, in the second sentence there are word "chek" and "blod". Both of them are meaningless. "chek" needed letter c before  $k \rightarrow$  "check" (see around/over) and there is double letter o in word "blood". Based on the last sentence which is written by student VIA8, word "becaus" is meaningless it needs e in the end of this word. (becaus  $\rightarrow$  because) but there is double n in the word dinner.

#### c. Grammar

Grammar is the important element in writing a text. The error in using grammar can be influenced a coherence on the text and it makes unclear idea that the writer intended. Based on the analysis which is written by the student VIIIC 18, There are some kinds of error in grammar on the table below

of error in grammar on the table below.			
Student's	Error	Correction	
name			
VIB30	Mr. Kingston	Mr. Kingston	
	check the	<b>checks</b> the	
	blood sugar	blood sugar	
	again of 12,4	again. It	
	at 21,00	showed 1,24 at	
	that's quite	21.00. That is	
	high because	quite high	
	Mr. Kingston	because he get	
	after dinner	insulin after	
	get her	dinner.	
	insulin.		
VIB28	He have a	He has bgl 6,4.	
	bgl of 6,4.	That is in	
	That is	normal range	
	normal.	because he gets	
	Because he	insulin	
	gave	injection.	
	injection		
	insulin.		
VIB9	So every 9	Every 9 pm	
	pm Mr.	Mr. Kingston	
	Kingston-	Smith always	
	Smith	has caution	
	always had	range of blood	
	caution blood	glucose.	
	glucose.		

There are two verbs in student VIB30's sentences. Verb check needs s (checks) because the subject is the third singular person (Mr. Kingston) and verb get in the second sentence should be added with s to because it has same subject with the first one. Then, from student VIB28 sentence, there is error in using auxiliary verb have in the sentence "he have a bgl of 6,4" subject he (third singular person) need auxiliary verb "has". "he gave injection insulin" should be changed into "he gets insulin injection". Verb gave is not make a sense based on the context and it is the past form of verb give. It replaced to verb gets because the context is Mr. Kingston is diabetic. The structure of noun phrase "injection insulin" is exchanged. It should be "insulin injection" because insulin modified injection.

Besides, the sentence of student VIB9, adverb always is used in present form and it cannot be joint with had (VII).

## d. Lexical Choice

Lexical choice is the subtask of natural language generation that involves choosing

the content words (nouns, verbs, adjectives and adverbs) in a generated text. Function words are usually chosen during realization. According to the explanation on lexical choice above. There are some errors in lexical choice based on the Diabetic Chart explanation by student on the table below.

Student's	Error	Correction
name		
Name VID10	The nurse took blood glucose Mr. Kingston at 07,30 am was 2,2 that very low. It because he not eating for several time yesterday for the all check	The nurse took blood glucose of Mr. Kingston at 7.30 am. The result was 2,2 mean Hypoglycemia. It because he was fasting yesterday for general check
	of body.	up.
VID8	Mr. Kingston Smith is	Mr. Kingston Smith is
	diabetes	diabetic who
	mellitus	are
	patient who	hospitalized.
	are	
	hospitalized.	
VID26	The last day, at 21.00 pm	The last day, at 21.00 pm, Mr.
	Mr. Kingston	Kingston blood
	blood glucose	glucose taken
	taken and show the	and showed the
		result 12,4. It meant
	result 12,4 it means he is in	
	raise blood	hyperglycemia
	24450 51004	•
	glucose.	

First, words "very low" is inappropriate in used. Very low blood glucose level is hypoglycemia. Fasting is the simplest word to explain patient who is not allowed to eating for several time. Phrase "all check of body" → general check up based on its context. Second, diabetic means someone who suffers diabetes mellitus. Third, raise blood glucose → hyperglycemia means there is high blood glucose level in the blood.

## **4.2** The factor cause of error in writing Diabetic Chart

Based on the observation, there are internal and external factors found. It will be explained as follows:

### 1. Internal factor:

Some students do not understand how to explaining in the Diabetic Chart. It shown from there are many blank papers for long time during it. Lack of idea. There is no idea when they explain the chart into paragraph it is as the cause of medical English vocabulary. it make them confuse in choosing the lexical choice. From most of them do not bring English dictionary during English session.

#### 2. External factor

Based on the research that is not caused by the student only but the other factors are influencing it. The lecturer has to be more active in giving the writing techniques. There is no quiz in the class during the session in order to improve student's memories in medical English vocabulary. Then, the English is started in the afternoon so some students feel sleepy in the class. The class situation is not sustained also, because of some bad odor, the Air Condition is out of order, hot and crowded class because of big number of student in a class (more than 30 student in each class).

## CONCLUSION

STIKES Bina Usada Bali is one of the health institution in oblige their student to be highly competent in English language. Their students are second language learner of English language which can be made some errors in writing skill especially.

The types of error that is caused by student in writing medical chart explanation classified by the grammatical errors and factors caused the error. The grammatical errors in writing it classified into; (a) punctuation error; (b) spelling; (c) grammar; (d) lexical choice. Then there are two factors caused the error. They are internal and external factor.

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