



Semantic Interpretations of Epistemic Modality Markers in Antibiotic Drug Labels

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Abstract

This study investigated the semantic interpretations of epistemic modality markers in antibiotic drug labels, which are considered as hazardous medical drugs to treat patients with bacteria infection. Previous studies that focused on the study of epistemic modality markers selected the text varieties of academic prose and newspapers in English. This current study pays attention to the degree of epistemic modality markers in antibiotic drug labels as appropriate use of antibiotic drugs is important to everyone. As stressed by Cheaito, Azizi, Sales and Slameh (2013), almost 70 percent of antibiotic drug users do not know the definition of antibiotic drugs. The data collection in this study is derived from three labels of antibiotic drugs which are *Amoksiklax 2X*, *Augmentin* and *Cravit*. They are made up of 30 tokens, referring to sentences. The data analysis follows Swan (2016) who divided epistemic modality markers into three degrees consisting of certainty, probability and possibility. After the data were analyzed, three English instructors were asked to validate the data analysis to ensure its accuracy and reliability. The results show that the highest percentage of epistemic modality markers appears with the degree of probability at 60 percent, especially with the epistemic modality markers *should*, as a result of politeness strategy (Jiang, 2006). It is believed that the results of this study will be beneficial to learners who use English as a Foreign Language (EFL) and learners who use English as a Second Language (ESL) in order to use epistemic modality markers correctly and appropriately.

Keywords: *Epistemic modality markers, antibiotic drug labels*

1. Introduction

In the present day, we live in an era of globalization where English is used as an international language in many countries of the world. Not only is English used as a medium of instruction inside classrooms, but it is also the language that is prevalently used in everyday life. For example, the literature that we read today is mostly written in English. In other words, we select to read English literature in order to upgrade ourselves and gain new information as written in literature. English is often required to be used as the language in official documents, international conferences and business transactions. In addition to those official activities, English also plays an important role in our recreational activities, such as watching movies, listening to music and some TV shows. Accordingly, it can be said that the use of English language and the routine activity of human life are intertwined today.

In the life of human beings, health is one of the most important factors for everyone to consider. To stay healthy is believed to be everyone's wish. However, sickness and diseases are unavoidable even though people try to take good care of their health. When people get sick, some of them go to see a doctor, while other people go to a pharmacy to discuss and buy medication themselves (Cheaito, Azizi, Sales & Slameh, 2013). Although some medications, such as antibiotic drugs, are strictly required to be prescribed by the doctor, there is a flexibility in some countries, such as Thailand, where antibiotic drugs are possible to be bought themselves in drugstores without any doctor's prescription. As a result, antibiotic drugs have become over-used and misused. It is reported by Cheaito, Azizi, Sales & Slameh (2013) that 42 percent of those buyers of antibiotic drugs do not have a doctor's prescription, but they rather get a pharmacist's help to buy the medication. Nearly 90 percent of the users confess that they do this in order to save their time and save their money.

Due to pharmaceutical advancement, antibiotic drugs have been developed for the sake of human beings and they could be used to treat various illnesses, such as bronchitis infection, skin infection and for use after surgery. Unfortunately, when someone just feels better from these diseases, they immediately stop

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taking the drugs. This may be because they might not have enough information about how antibiotic drugs should actually be used (Cheaito, Azizi, Sales & Slameh, 2013)

With regard to a lack of information about antibiotic drugs, one of the causes may be because the labels of antibiotic drugs available in the market are imported from overseas and the labels are written in the English language or other languages. The language in the field of medication is regarded as being difficult for some people to understand. Consequently, they do not read and understand the label of the antibiotic drugs well enough before taking them.

With this matter, this study focused on the epistemic modality markers in antibiotic drug labels. The use of epistemic modality markers contains *subjectivity*, referring to assessment and point of view about something that one should or should not do. Epistemic modality markers range from certainty, such as *must*, to possibility, such as *might*. This allows English language learners as antibiotic drugs users to gain information about what they should or should not do while taking antibiotic drugs.

With the information above, it is noticeable that antibiotic drugs are potentially hazardous medications. Taking the medication themselves without a doctor's prescription or without careful reading of labels could be harmful to users. The study of epistemic modality markers, such as *may*, *might* and *should* in antibiotic drug labels allows the users to know how they should behave appropriately while taking this type of medication. This information leads to the following research objective and research question.

2. Objective of the Study

To investigate the degree of epistemic modality markers in antibiotic drug labels

3. Research Questions

What is the degree of epistemic modality markers in antibiotic drug labels?

4. Literature Review

4.1 Form and Meaning of Epistemic Modality

Epistemic modality, sometimes called *propositional modality*, is known as a kind of modality to assess and evaluate information as provided by writers, as in (1).

(1)

(a) I think you *should* sit here.

(b) I think you *might* sit here.

Examples (1a) and (1b) contain the epistemic modality *should* and *might*, which are uttered with different degrees of certainty. The use of different degrees of certainty sometimes depends of the speaker's level of confidence and information that they have. This kind of assessment is not obligation, such as *you cannot smoke in the cinema* as this utterance may involve legitimacy.

As in (1), epistemic modality markers have different degrees of certainty (Swan, 2016). In (1a), it is the addressee's option whether he/she would like to *sit here* or not. However, the utterance in (1b) is presented with an attitude that the hearer may *sit here*. The degree of certainty is normally ranged into three degrees (Swan, 2016), as in certainty, probability and possibility, as in (2).

(2)

(a) It *might* rain today.

(Low certainty)

(b) It *would* rain today.

(Medium certainty)

(c) It *must* rain today.

(High certainty)

Among the three examples, the epistemic modality marker *must* in (2c) is the strongest level. The speakers must be highly confident with his/her information before providing this utterance. However, this study only emphasizes on epistemic modality markers as explained above. *Deontic modality*, referring to obligation and dynamic modality, referring to one's ability, as in (3), will be excluded from this study.

(3)



(a) Peter *must* not smoke in the theater.

(Deontic modality)

(b) Mary *can* swim.

(Dynamic modality)

In (3a), the modality is deontic as it involves legitimacy, whereas in (3b), the modality is dynamic as swimming refers to one's ability.

4.2 Use of Epistemic Modality Markers

Aside from the degrees of certainty of epistemic modality, this section addresses different functions of epistemic modality, such as politeness strategy, prediction, self-correction and warning as in (4).

(4)

(a) Your claim *may* be true in some cases. However, this is arguable.

(b) It *would* be successful to try this new marketing strategy.

(c) I guess Peter may select to study Veterinarian studies, oh no he hates dogs so much, so he *would* not be the vet.

(d) Pregnant women *should* consult a doctor before taking this medication.

In (4a), the epistemic modality markers *may* is used with tact or politeness strategies to make a polite and humble argument. So, (4a) is an example of negotiative function (Quiping, 2012). In (4b), the epistemic modality *would* is used with the functions of one's prediction or assumption. In (4c), the speakers employ epistemic modality for the sake of self-correction. The epistemic modality markers *should* as in (4d) is used with the function of warning.

4.3 Epistemic Modality and Text Varieties

This section reviews the study of epistemic modality markers in previous studies. Yang, Zheng and Ge (2015) studied epistemic modality markers in medical research articles. They examined the degree of epistemic modality markers in different sections of research, including introduction, methods, results and discussion. The results obviously show that the epistemic modality is frequently used in the section of discussion at nearly 70 percent. The use of epistemic modality appears mostly with the low degree of certainty at 66.93 percent followed by the medium degree of certainty at 24.72 percent, as in (5).

(5) In light of our findings in infants with RSV bronchiolitic, it *might* be that interleukin 9 protein or mRNA is only detectable in the asthmatic airway during acute infective exacerbations.

(Yang, Zheng & Ge, 2015, p. 5)

The use of epistemic modality marker *might* in (5) shows the level of writer's confidence based upon the empirical evidence that is found in the study. The degree of epistemic modality markers in medical research articles is likely to be presented with lower degree of certainty.

In addition to medical research articles, Cheng and Cheng (2014) used a corpus of civil judgement to investigate different degrees of epistemic modality. The use of epistemic markers *may* occur frequently with this type of document, as in (6).

(6) It *may* or *may* not be material, but there is no other relevant degree of legal error.

(Cheng & Cheng, 2014, p. 8)

In (6), the epistemic modality marker *may* indicate medium degree of uncertainty and it is used with argumentative function.

Furthermore, Panocová (2008) focused on the study of academic texts as in biochemical texts where the results show that the use of medium degree of epistemic modality occur more frequently than others, as in (7).

(7) The convergence of this endocrinological research suggests that the measurement of cortisol, DHEAS and melatonin *may* be important to understand the mechanisms underlying the physiological effects of these psychosocial interventions.

(Panocová, 2008, p. 205)

It can be seen that the researchers normally used medium and lower degree of epistemic modality in research papers as there are some variables that are not totally controllable in research studies. So, most



research papers provide possibility rather than confirmation. Based upon previous studies, the formal document is likely to employ epistemic modality markers in a lower degree, such as *may* and *might*.

On the other hand, the degree of probability is frequently used in less formal text varieties. For example, Bonyadi (2011) selected the data collection from English newspapers, such as (8).

(8) In a democratic Zimbabwe, or in Africa that insisted on respect for democratic elections, Mr. Tsvangirai *would* be president and Mugabe *would* be gone.

Written news sometimes involves propaganda to make the new stories of news become more interesting and increase the sales volume of newspapers. With this reason, the higher degree of epistemic modality is likely to be used to make the stories become more fun, interesting and entertaining.

4.4 Antibiotic Drugs

The word *antibiotic*, an ancient Greek word, is derived from *antiviotika*. Sometimes, It is called *antibacterial drugs*. It is a type of medication that is used to cure or prevent bacterial infections. However, antibiotic drugs cannot kill viruses, which are the cause of influenza. Sometimes, antibiotic drugs denote a resistance of life. Jean Paul Vuillemin was the first person who coined the term *antibiosis*, referring to resistance to life. It was later on changed into antibiotic by Selman Abraham.

Historically, the antibiotic drug was developed in the 20th century. It was originally thought to eradicate various kinds of bacteria, especially in developing countries. Due to the misuse of antibiotic drugs, many types of bacteria have developed to become resistant to antibiotic drugs. This is a huge problem for many countries around the world. The World Health Organization has announced that the development of bacteria to become resistant to antibiotic drugs is a chronic problem that needs solving urgently.

Regarding the general characteristics of antibiotic drug users, Cheaito, Azizi, Sales and Slameh (2013) report that working people aged between 30-60 years old take antibiotic drugs at 53.3 percent. It is also reported that 48.9 percent of those who take antibiotic drugs have the education level of university undergraduate and postgraduate. In addition, 70.5 percent of those who take antibiotic drugs are advised by a doctor (Cheaito, Azizi, Sales & Slameh, 2013). The top three antibiotic drugs that are frequently purchased are amoxicillin and levofloxacin. 60 percent of the participants confessed that they take these antibiotic drugs more than once a year.

5. Methodology

The data collection in this study is gather from 3 antibiotic drug labels including, *Amoksiklax 2X*, *Augmentin* and *Cravit*. These three antibiotic drugs are used according to three pharmacist's suggestion as they are antibiotic drugs that are generally allowed to sell in pharmaceutical drugstores. There are 30 tokens, refereeing to sentence of epistemic modality markers in antibiotic drug labels.

5.1 Epistemic Modality Markers

Numerous syntactic categories can express the writer assessment concerning given information. However, Hu and Li (2015) indicated that English native speakers usually use epistemic modality markers more than other syntactic categories, such as verb phrase, adverbial phrase and modal phrase, as in (9).

(9)

- | | |
|--|--------------------|
| (a) <i>I think</i> Peter is a doctor | (Verb phrase) |
| (b) <i>Basically</i> , we should learn foundation of mathematics | (Adverbial phrase) |
| (c) You <i>may</i> go now. | (Modal phrase) |

Example (9) presents different syntactic categories of epistemic modality markers via the verb phrase *I think*, the adverbial phrase *basically* and the modal phrase *may*. Despite having different kinds of epistemic markers, Hu and Li (2015) indicated that epistemic modality markers are used more often than other syntactic categories.

**Table 1** Epistemic Expressions with Different Syntactic Categories (Hu & Li, 2015)

Categories	Frequency	percentage
Epistemic Modality	1,269	38.46%
Verb	1,049	31.79%
Adverb	812	24.60%
Noun	2	0.06%
Adjective	168	5.09%
Total	3,300	100%

Table 1 presents the frequency of epistemic expressions in various syntactic categories. Basically, Hu and Li (2015) reported that the epistemic modality markers occur the most at 38.46 percent. Accordingly, this study follows Hu and Li (2015) in regard to the investigation of the frequency of the occurrence of epistemic modality markers. The data collection in this study follows Radford's (2009) sentence structure. The data were collected based upon sentence level according to generative grammar. Generative linguists believe that language use is systemic, so we study the system of language for the same of applying in actual use.

5.2 Data analysis

This section presents how epistemic modality markers in antibiotic drug labels are interpreted.

(10)

Table 2 Epistemic Modality Markers in Antibiotic Drugs Labels

Degrees	Examples
Possibility	(a) Convulsions <i>may</i> occur in patients with impaired renal function or in those receiving high doses.
Probability	(b) Use <i>should</i> be avoided during pregnancy, unless considered essential by the physician.
Certainty	(c) If allergic reaction occurs, Augmentin Therapy <i>must</i> be discontinued and appropriate alternative therapy instituted.

This current study follows Swan (2016) in order to classify the degree of certainty in antibiotic drug labels into three degrees. The first one is acknowledged as the degree of possibility. This degree includes the epistemic modality markers of *may* and *might*. The second degree is called *probability*, which includes the epistemic modality markers of *can*, *could*, *shall*, *should*, *will* and *would*. In addition to that, the highest degree of epistemic modality is *certainty* which includes *must* and *have to*. Textual examples of antibiotic drug labels are given as follows.

(11)

The occurrence at the treatment initiation of a feverish generalized erythema associated with pustula **may** [POSSIBILITY] be a symptom of acute generalized exanthemas pustulosis

With this process of data analysis, the data validation is given as follows:

The degree of possibility as in (11) as in may and might report low tendency of occurrence.

5.3 Data Validation

The process of data validation is shown in Table 3.

**Table 3** Data Validation
(12)

Degrees	Examples	Instructor 1		Instructor 2		Instructor 3		Percentage of Inter-rater reliability (%)
		A	D	A	D	A	D	
Possibility	(a) Convulsions <i>may</i> occur in patients with impaired renal function or in those receiving high doses.	✓		✓		✓		100
Probability	(b) Use <i>should</i> be avoided during pregnancy, unless considered essential by the physician.	✓		✓		✓		100
Certainty	(c) If allergic reaction occurs, Augmentin Therapy <i>must</i> be discontinued and appropriate alternative therapy instituted.	✓		✓		✓		100

In order to ensure the reliability and accuracy of data validation, three English instructors were asked to review the data analysis. If two or three instructors placed a tick in column A, referring to agreement, the data analysis gained reliability. However, if one or no instructor placed a tick in column A, representing disagreement, the data were re-analyzed. The results and discussion of epistemic modality in antibiotic drug labels will be presented in the following section.

6. Results and Discussion

This section provides the results and discussion of epistemic modality markers, which are divided into three degrees of certainty (Swan, 2016), as used in antibiotic drug labels.

Table 4 Frequency and Percentage of Epistemic Modality Markers in Antibiotic Drugs Labels

Degrees	Frequency	Percentage (%)
Certainty	2	6.67
Probability	18	60
Possibility	10	33.33
Total	30	100

Table 4 informs the frequency and percentage of different degrees of epistemic modality markers in antibiotic drug labels. The highest percentage occurs with the degree of probability at 60 percent followed by the degree of possibility at 33.33 percent. The lowest percentage occur with the degree of certainty at only 6.67 percent.

The frequent use of epistemic modality markers in antibiotic drug labels is to provide the safety for medication users. It looks like the doctors' advice and suggestion. Sometimes it is pharmaceutical personnel's suggestion toward patients. In this study, it is found that the epistemic modality marker *should* occurs frequently with the degree of probability, as in (13).

(13)

(a) Use *should* be avoided during pregnancy, unless considered essential by the physician.

(b) Amoxicillin/clavulanic acid *should* be avoided if infectious mononucleosis is suspected since the occurrence of a morbilliform rash has been associated with this condition following the use of amoxicillin.

(c) Amoxicillin/clavulanic acid *should* be used with caution in patients' evidence of hepatic impairment.



The use of epistemic modality *should* go along the same lines with the principle of tact or politeness strategies concerning advice and suggestion. When advice is given to someone, it should be given politely. As mentioned by Yang, Zheng and Ge (2015), the epistemic modality marker *should* is the most frequent modality marker occurring in the context of suggestion to show politeness strategy. Moreover, the frequent use of probability *should* is to avoid the writers' overconfidence, and it is considered prudence (Chen, 2010).

The results of this study also go along the same lines as the medical research studies written by Yang, Zheng and Ge (2015) where epistemic modality markers are likely to occur with lower degree of certainty as in possibility, such as *may*.

(14)

(a) In a single study, in women with preterm, premature rupture of the foetal membrane it was reported that prophylactic treatments with amoxicillin/clavulanic acid *may* be associated with an increased risk of necrotizing enterocolitis in neonates.

(b) Prolonged use *may* occasionally result in overgrowth of non-susceptible organisms.

(c) Antibiotic-associated colitis has been reported with nearly all antibacterial agents including amoxicillin and *may* range in severity from mild to life threatening.

(d) Nausea is more often associated with higher oral doses. If gastrointestinal reactions are evident, they *may* be reduced by taking amoxicillin/clavulanic acid at the start of meal.

Most documents in formal register as in scientific documents and medical documents are likely to be careful about their use of epistemic modality markers. They will not provide information with overstatement and propaganda. The different degrees of epistemic modality markers are used with different semantic denotations, such as general advice, avoidance of drug use, caution with patients of chronic diseases, side effects and warning. The use of epistemic modality *may* in this study also go alone the same lime with Vold (2006) where the use of the possibility *may* occur frequently in medical research article.

6.1 General Advice

Some advice is given to the antibiotic drugs' users when they feel that the tablet of antibiotic drug is too big to swallow.

(15) Tablets *may* be broken in half and swallowed without chewing

It is possible to break a tablet into half but chewing it before swallowed is not recommended. This is not a serious problem and breaking the tablet of antibiotic drug into half is not a serious issue. The epistemic modality of possibility is used in this context.

6.2 Avoidance of Drug Use

The epistemic modality markers in the level of probability are to explain the avoidance of drug use as in (16).

(16)

(a) Use *should* be avoided during pregnancy, unless considered essential by the physician.

(b) Amoxicillin/clavulanic acid *should* be avoided if infectious mononucleosis is suspected since the occurrence of a morbilliform rash has been associated with this condition following the use of amoxicillin.

In (16a), the pregnant women should avoid using this medication or they can be used with close monitoring by a doctor. In (16b), for those who have mononucleosis infection, the taking of this medication should be avoided. The avoidance of drug use is used with the epistemic modality markers with the degree of probability because the negative or unsatisfied consequences may not appear with all cases, which depends on individuals.

6.3 Caution with Patients of Chronic Diseases

When one needs to be careful about something although its consequence has not yet occurred, the epistemic modality markers with the degree of probability are often used.



(17)

(a) Amoxicillin/clavulanic acid *should* be used with *caution* in patients' evidence of hepatic impairment.

(b) Hepatically impaired patients *should* be dosed with *caution* and hepatic function monitored at regular intervals.

The antibiotic drug has to be used very carefully with those patients who have hepatic impairment. So, the stronger degree as in the probability *should* are provided as information for the patient to be careful about the use.

6.4 Side Effects

When people take antibiotic drugs, side effects are likely to occur and this depends on individuality. The side effects of taking this medication are not regarded as something serious when compared to having chronic disease. So, the epistemic modality markers with the level of possibility such as *may*, are often used.

(18)

(a) Nausea is more often associated with higher oral doses. If gastrointestinal reactions are evident, they *may* be reduced by taking amoxicillin/clavulanic acid at the start of meal.

(b) Prolonged use *may* occasionally result in overgrowth of non-susceptible organisms.

(c) Hepatic events have been reported predominantly in males and elderly patients and *may* be associated with prolonged treatment.

(d) Patients received Levofloxacin dose of 750 mg *may* develop some adverse reaction such as dizziness, headache, nausea or vomiting more than Levofloxacin dose of 500 mg.

In (19a), it is recommended that those patients who have the symptom of nausea while taking this medication, could reduce their symptoms by taking it at the beginning of their meal. In (19b), the continuous use for a long time of this medication may lead to the side effect of overgrowth of non-susceptible organisms. As shown in a single case from a medical report, this cannot be generalizable to everyone. So, the use of *may* is used in this context.

6.5 Warning

The different degrees of epistemic modality markers are also provided with the antibiotic drug labels for warning. Warnings are given to patients who take antibiotic drugs. Warning is ranged from different degree of danger to our health. Some action that may be a result of death is used with *must*, while some action that can lead to disobedience of antibiotic drug is used with the epistemic modality *may* as in (19).

(19)

(a) In a single study, in women with preterm, premature rupture of the foetal membrane it was reported that prophylactic treatments with amoxicillin/clavulanic acid *may* be associated with an increased risk of necrotizing enterocolitis in neonates.

(b) The medical product *should* not be used after the expiry date.

(c) If allergic reaction occurs, Augmentin Therapy *must* be discontinued and appropriate alternative therapy instituted.

(d) Before initiating therapy with Augmentin, careful enquiry *should* be made concerning previous hypersensitivity reaction to penicillins, cephalosporins or other allergens.

(e) Treatments *should* not be extended beyond 14 days without review.

(f) Prolonged use *may* also occasionally result in overgrowth of non-susceptible organisms (super infection) that can occur with fungi, bacteria and virus.

In (19a), the warning to pregnant women is derived from a single case of a study. As agreed with Yang, Zheng and Ge (2015), medical reports tend to provide a lower degree of epistemic modality, such as *may*, as it was found in just a single case. So, the result may not be generalizable. However, the warning in (19b) is used with a higher degree of epistemic modality marker as in *should* as it is applicable to everyone. Taking antibiotic drug over 14 days is not recommended. With this description, the epistemic modality with the level of probability is used for warning as it could be dangerous for the users. Those who are allergic to



penicillins and cephalosporins should be careful before taking antibiotic drugs as it is hazardous and can be a cause of death. The longer use of antibiotic drug can result in super infection.

7. Pedagogical Implications

As mentioned earlier, this study will be useful for learners of English as a Foreign Language (EFL) and learners of English as a Second Language (ESL). This study focuses on the study of implicit learning of grammar, where the learners learn grammar in context where form, meaning and use could be learned together.

Implicit learning of grammar is a controversial issue in many countries where English is learned as a foreign language. Numerous English teachers and educators believe that one of the best ways to learn grammar is explicit learning (Jakobsson & Knutsson, 2020). Implicit instruction of grammar learning refers to learning grammar rules without being aware of it. This allows the learner to spend their free time to learn language themselves outside the classroom.

English language teachers are encouraged to teach modality to English language learners via authentic texts, such as the labels of medical drugs in this study. So, English language learners can learn form, meaning and use at the same time.

Although some claim that it is not easy to understand grammar structures via implicit learning, only learning rules without use in explicit grammar may not be applicable in real life. Learners tend to have attitudes in terms of difficult learning of grammar in classroom, but the level of practicality is low. Since the sample size of this current study is regarded as small, future research should add more data in the future study for the sake of generalizability.

8. Conclusions

This current study investigated the use of epistemic modality markers in antibiotic drug labels in order to answer the following question.

What is the degree of epistemic modality markers in antibiotic drug labels?

Based upon the literature review in this study, the use of epistemic modality markers in medical research is likely to occur with lower degree (Yang, Zheng and Ge, 2015). The result of this study seems to go along the same lines with this aspect, where the degree of certainty is not found in the use of antibiotic drug labels. The majority of epistemic modality markers in this study frequently occur with the marker *should* (i.e., use *should* be avoided during pregnancy...) due to politeness strategies (Jiang, 2006).

Two degrees of epistemic modality markers as in probability and possibility are also applied with different semantic denotation. The use of epistemic modality markers with the degree of probability occurs with avoidance and caution. These aspects are hazardous to the user's life and effect to chronic disease. So, a stronger degree of epistemic modality is applied in this medical text. On the other hand, the epistemic modality with the degree of possibility is applied with side effects, such as nausea, which might not be life threatening. Therefore, epistemic modality markers in antibiotic drug labels are provided with rather precise assessment, relating to the level of danger to someone's life. This could be a good source for learning about epistemic modality markers with the degree of assessment for EFL and ESL learners. However, the results of this study are only generalizable to the epistemic modality markers in English antibiotic drug labels. Generalizing the results of this study to other types of texts might not be applicable to the optimal level. For future research in the field of epistemic modality markers, it is recommended that a study of epistemic modality markers in other kinds of texts, such as food labels would contribute something new to the field.

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