LEXIS AND SYNTAX OF MEDICINE PRODUCT WARNINGS IN THE PHILIPPINES

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ABSTRACT

In the Philippines, parents refused their children having an anti-measles and anti-dengue vaccines, which created a medical outbreak. This may not happen if product warnings have been given and explained to the parents. Indeed, product warnings are found to be in their optimal position in safeguarding the life of consumer-patients. This paper anatomizes the lexical features of medicine product warnings in the Philippines which are crucial in the response discourses. A range of linguistic frameworks were applied and significant findings were drawn. Gaps were identified on the use of noun abstractness, synthetic personalization, field continuum, adjectives, and adverbs. Such an investigation brought up the transparency of communicative features of medicine safety texts.

In the end, linguistic components create a vital impact on the legal content adequacy of medicine product warnings, unfolding the vitalities of these messages in facilitating informed decision-making among consumer-patients.

KEYWORDS

medicines, consumer-patients, linguistic components, product warnings

1. INTRODUCTION

Consensus exists in the body of research agreeing that product warnings must contain four elements such as a signal word, a hazard statement, a statement of consequences, and instructions for avoiding the hazard (Heaps & Henley, 1999; Sanders & McCormick, 1993). If product warnings are badly planned, Tiersma (2002) accentuated that product manufacturers are held liable to law. Legal responsibilities for damages strengthen the case of manufacturer's negligence on his failure to provide effective product warnings among consumers.

Product warning texts are relevant to the civil context and as interesting as any criminal case. In the Philippines, product recall is the immediate legal solution once the hazard has been known to Food and Drug Authority (FDA) or Department of Trade and Industry (DTI). These government agencies instantly warn the public through mass media about the discovered chemical risks in the product. However, the issue of language conformity in the warning discourse does not resolve. This paper takes a closer look on the lexical usage of medicine product warnings which served as the most immediate reference of parents and health personnel in identifying the risks associated in medicine use. The manufacturers' conformity on the language safety components of warning texts is weighed utilizing linguistic tools. Hence, evaluating if they correspond to the criteria set by Consumer Act of the Philippines on consumer safety information.

1.1. Medicine Product Warnings in the Philippines

According to Go (2001), medicines, being regulated goods, cannot be treated as mere trade commodities but should be managed as a health utility. Akin to his statement, Philippines was bannered in various newspapers' headlines globally in April 2016 as the country's Department of Health (DOH) vaccinated 830,000 elementary schoolchildren with the first ever vaccine which claimed to fight dengue (Philippine Daily Inquirer, 2018), a possible life-threatening mosquito-borne disease that can cause an unsafe drop in blood pressure and life-threatening bleeding. After a year, such vaccination initiative by the government brought panic among parents as it is labelled by Philippine Safety Advocates (2017) in their media campaign that such program is the biggest government funded clinical-trial-masked-as-a-public-health-program scam of an experimental drug in the history of the DOH. From here, the Philippines' Food and Drug Authority (FDA) withdrew the approval of the vaccine.

With the government's concern to safety, the question of not determining the product risks prior to vaccine's distribution became the major concern of the panicking public specifically the parents whose children had been vaccinated by such dengue preventive. Moreover, the issue of not incorporating the hazards on its product warnings created a major dismayed to the warning researchers since the government failed to safeguard the public's right to know and the drug authorities' liability for consumer safety.

In November 2013, Philippine Star featured an article highlighting the FDA's order to recall four products of a certain pharmaceutical firm after they are found to be unregistered. Most of their products are anti-depressants.

Dacumos and Madrunio in 2018 tested the comprehensibility of existing product warning texts printed on medicines, household chemicals, and beauty product items through an experimental method via cloze test. A total of 47 mothers who are high school graduates, still studying in college, and working professionals were chosen randomly as respondents. The tests are developed and taken from authentic sources (existing product warnings), which yielded 65 items for medicines, 75 for household chemicals, and 50 for beauty products. The analyses reveal that medicines have the highest percentage of text difficulty, while household chemical products exhibit a certain degree of text complexity. Meanwhile, beauty product warnings are the easiest, as they present the lowest difficulty index.

Another crucial issue on medicine risks was also posted on the DTI's website which discloses the importance of honest information in the dietary food supplement which could be bought in grocery stores. The caption "No Approved Therapeutic Claim" is suggested to be printed on the main display panel of all labelling materials used in food supplements (i.e. the immediate label of the bottle, drug box, carton, information sheet, leaflets, etc.) to guarantee that these consumer products are not commercially sold or publicized with some therapeutic claims.

Alarmingly, the volume of safety information presented are crucial in the analyses of the real-world effectiveness of product warnings. Emphasizing that the clarity of language is essential in providing product warnings, RA 7394, Art. 7 of Philippine Constitution generally promulgates the inclusion of product caution having clear and adequate safety warnings or instruction, or requirements. However, product liability attorneys and government agencies oftentimes concentrate on product defect cases.

1.2. Forensic Linguistics

The demarcation line which separates business and law is obliterated when product liability cases started gaining ground. Distinctively, the use of language is carving a place in the field of law and has resulted in the framing of Forensic Linguistics which is the crossing point between language and law. Olsson (2006) provided proof that the law is bounded with the police force, court trial matters, legislation, product or property disputes, court proceedings, or some inevitable real life situations which look for a legal remedy. Language, in most cases, is extracted and thereby becomes evidence in court.

Shuy (1993) identified different crimes associated with language which product warnings are included. In 2002, Tiersma emphasizes that forensic linguistics is the usage of linguistic acumen and methodologies in solving factual issues that are relevant to legal disputes. From here, a great deal of interest in the intersection line between language and law is drawn, particularly in the product warning discourse.

Manifestly, complexities of language enable the connectedness of the two gigantic genres of the marketplace--law and business. Analyzing the word, spelling, grammar, phrases, syntax and even punctuation marks is a common evaluative aspect of language and these are all observable in the writing of product warnings which is basically under the umbrella of product liability.

1.3. Language and Communication

In communication, two or even more individuals send and receive messages and could be encoded automatically by human language. The lexical features of communicative health information are made available to consumers and therefore analyzed to determine the safety level of product warnings.

Despite the keenness of most languages to keep pace with the acceleration of global developments in the various scientific, intellectual and civilizational fields (Zivingi, 2022), this may sometimes lead to failure in comprehending the communication input. Likewise, the doctor-patient interaction always leads to assumprion when the latter will be asked ‘How bad is your pain on a scale from one to ten” (Stern, 2021 p.37). As such, the doctor’s inquiry becomes crucial since the diagnosing question’s communicability can be measured from one to ten.

The cited scenarios may sometimes collide with obstacles related to the features of languages (Zivingi, 2022) and may eventually create an erroneous assumption. Hence, the comprehensibility of language input is critical in the communication process which product warnings are not exempted.

Safety communication could be achieved if the message is evidently clear and will totally warn the product users about the imminent hazards. The manufacturers as senders of the message are held liable in the construction of the warning texts. The message must be available and comprehensible to the consumers as target receivers of communicative texts. If the transmitted message is inadequate, receivers can formulate limited information about the products, which in the end, an erroneous impression can be perceived. Shuy (2005) highlights that communication necessitates a specified quantity of assigned data in order to impart the framework essential for product consumers to comprehend what is being shared with them. When the message of the sender creates a misleading impression to target receivers, it leads to wrong inferences and conclusions, and ultimately it results to communication breakdown.

1.4. Research Question

Language plays a pivotal role in transmitting health-communication information, likewise it determines the adequacy issues of existing product warning texts available in the mainstream supermarkets and drugstores. This research posits the question: What are the lexical features of selected medicine product warnings in the Philippines? This inquiry brings important implications for the adequacy requirements of product warnings, realizing the vitality of cautionary texts for consumers.

1.5. Theoretical Framework

To bring out the optimization of the linguistic features of the warning texts, the study investigated the lexical attributes of medicine product warnings.

In analyzing the lexical features, the usage of Lyon's noun entities (1977) was applied. Moreover, Halliday's Words in Field Continuum (1993) plays a vital portion in categorizing the classification of words. In the use of signal words, this study mirrored what Shuy (2008) employed in analyzing the alert lexicon in product warnings based on Global Harmonization Standard (2013) and American National Standard Institute's (2002) legal yardsticks on warning the consumers.

Also, adjectives in product warnings were examined based on Marza's (2011) evaluative approach in analyzing the attributive descriptive words. On one hand, adverbs were analyzed according to Frey and Pittner (1999), Pitner (1999, 2000a, 2004) and Frey's (2000) usage of manner adverbs. Temporal adverbs were also explored based on Kiefer's (2007) framework on the 'time point' of adverbs. These linguistic tools aided in examining the lexical attributes of Philippine consumer product warnings specifically the medicines.

2. METHOD

The study applied a textual evaluation of the linguistic features of medicine product warnings in the Philippines. By describing the lexical features of product manufacturers' word choice, frequency and percentage tools were applied.

2.1. The Corpus

Every medicine is believed to perform miracles for some groups of patients. Whether prescription or over the counter drugs, these medicines intend to save lives, enhance the patient's wellbeing, or provide them with hope that their health will be better upon medicine intake. Basically, mothers decide for their children on what medicine to take particularly in times of fever and flu. However, if the medicine is prescribed by doctors, mothers monitor the health condition of the family members.

The choice of medicines to be included as corpus was based on the survey conducted among 50 mothers in the supermarket and drug stores who purchased the medicine needs of their family. Below are the results.

Table 1. Surveyed Mothers' Top Medicine Needs

Products	Frequency	Percentage
Paracetamol	25	50
Ibuprofen-Paracetamol	10	20
Mefenamic Acid	5	10
Diatabs	3	6
Amoxicillin (liquid)	3	6
Alcohol	2	4
Aqua Oxinada	2	4
Total	50	100

Considering the ethical aspects of the study, the product brands and company names of medicine manufacturers were coded. Every product warning was masked; MED was referred to medicines, while #1 (and so on) was assigned to each product based on the arrangement of warnings in the analysis of the research corpus. As such, this research selected 50 warnings of medicine products which served as the major corpus of this construct.

2.1.1. Data Analysis

This research is anchored on the study of Shuy (1990, 2008) on the warning adequacy issues of product's cautionary texts. He presented several examples of linguistic consultations in civil cases that describes the theories and techniques applied by linguists in examining language evidence.

Qualitative method of research in examining the adequacy of medicine product warnings in the mainstream Philippine market, cautionary text was examined based on lexical features such as signal words, nouns, synthetic pronouns, field continuum, adjectives, and adverbs. The adequacy issues of product warnings were given importance, specifically in promoting comprehension alongside consumer safety. In evaluating the data, frequency and percentage counts were measured.

3. RESULTS AND DISCUSSION

The study presents the lexical and syntactical modes which encompass words, phrases, and sentences in product warnings specifically on the existing safety texts of medicines.

3.1. Signal Words

An alert lexicon (Shuy, 2008) is placed before the main text of the product warnings to immediately caution the consumers. Global Harmonization Standards (2013) and ANSI (2002) recommend the terms DANGER, WARNING, and CAUTION to determine the degree of product hazards from highest to lowest. The table below presents the signal words examined in the study.

Table 2. Signal words used in medicine product warnings

Signal Word	**Frequency**	**Percentage**
Precaution	22	44
Caution	17	34
Warning	7	14
Warning and Allergy	1	2
Stomach Bleeding	1	2
Important	1	2
Poison	1	2
Total	50	100

Based on the analysis, common among medicine product warnings in the Philippines utilized alert lexicons like warning, caution, and precaution such as the following:

Precautions: Keep away from eyes and mucous membrane. Keep away from Children. (MED#13)

Precautions: Always keep on container tightly close. Store at temperature not exceeding 30'C. (MED#16)

PRECAUTION attains 44 percent contribution in the corpus. Oxford dictionary (2016) defines 'precaution' as a situation taken beforehand to ward danger or secure safety. The sample extract (MED#13) is giving emphasis on the location where it should be placed before and during its usage which is parallel to the objective of the word Precautionary.

Another signal word is identified in the corpus, the utilization of CAUTION.

> Caution: For external use only. Avoid contact with eyes. Prolonged used is discouraged. (MED#49)
>
> Caution: If redness, irritation occurs, discontinue using and in case deep or punctured wounds or serious burns, consult a physician. (MED#17)

Signal word 'caution' transpired 34 percent in the corpus. However, extract MED#49 tells about what to avoid in using the product which is not related with the supposed content of the product warning extract (MED#17), it is symmetrical with the warning content of the previous. On the other hand, it varies in the last phrase recommending to consult a physician in case irritation occurs. Though the extract mentions possible risks, it does not state the nature of danger associated in the product, hence it does not correspond with the use of CAUTION as alert lexicon.

Meanwhile, alert lexicon such as 'warning' incurred 12 percent contribution in the corpus. It is used if the product will cause death to its users. However, extract MED#35 represents the mismatch between the warning content and its signal word.

> Warning: Enzymes should not be used together with this solution. Do not boil internal in SEPTOCARE solution. (MED#35)

The usage of 'warning' according to ANSI (2012) and Global Harmonization Standard (UN, 2013) will lead the product user to death, however, it is in contrary with the content of the sample extract. If error in the usage of product persists, there is no warning of death specified in the main cautionary texts.

The most common alert lexicon used in the warnings was precaution obtaining 44 percent of occurrences. It was followed by caution with 34 percent and the warning lexicon with 12 percent. However, mix-up of signals words were also identified which incurred limited percentages in the corpus.

Pointing the variation of signal words applied on medicines, it was revealed that there were no standards in the usage of signal word in the existing product warnings. The identified mixed-up of signal words reflects the country's unspecified criteria on the use of signal word.

3.2. Order of Nouns

Generally, nouns and noun phrases are significant and purposeful parts of speech which determine product warning issues specifically on named identification. According to Vigliocca (2011), nouns serve as the subject of discourse be it an object or a person; hence, the nouns of product warnings are categorized and underlined to mark the observations.

3.2.1. Concrete and Abstract Nouns

Concrete and abstract nouns are directly linked to perceivability. Concrete nouns are known for physical entities with characteristics like shapes, parts, materials, and alike whereas abstract nouns lack physical attributes (Katja, 2008; Crystal, 1995).

In analyzing the corpus, Lakoff's (1987) Cognitive Linguistics underscores the ontology of noun entities was applied, specifically Lyons's (1977) peculiarity of the first three orders of nouns. The summary of results is shown in Table 3.

Table 3. Order of nouns used in medicine product warnings

Order of Nouns	Frequency	Percentage
First	9	18
Second	20	40
Third	7	14
Total	36	72

Defined by Lyon (1977), first order entities are directly referring to a person, animals, objects, and other organisms which are situated in space. The current research categorized the concrete nouns of medicine product warnings.

Precautions: Always keep on container tightly close. Store at temperature not exceeding 30'C. (MED#16). The study found out that 18 percent of product warnings utilized first-order entity. The words *eyes* and *nostrils* were employed to directly inform the patients about the body parts which might be prone to danger. Meanwhile, analgesic was specified to medicine which might cause adverse reaction upon intake, and container named the appropriate place where the medicines should be kept. Such usage implied that medicine manufacturers were trying to be specific in their warnings and they are attempting to create a 'temporary concept-formation' (Lyons, 1977). However, 18 percent of occurrences were minimal.

Meanwhile, abstract nouns bring up the second-order and third-order units. Lyon (1977) highlights that second order entities involve events, processes, and state of affairs. Below is the extract.

Caution: Should be used with caution in patients with hypertension, in patients whose cardiac reserve is poor, and those with heart failure since deterioration of heart failure has been noted. (MED#12) The terms hypertension and deterioration connote state of affairs as to illness and worsening condition of heart might take effect if medicine will not be taken with caution.

Second order entities are definitely observable and perceptible. Surfacing these nouns in medicine warnings occurred 40 percent in the corpus, hence, naming activities which might take place once the warnings will be neglected by the consumers of pharmaceutical drugs is evident.

Meanwhile, third order entities are abstract concepts, propositions, or more generally ideas outside place and time. See the extract below.

Caution: Before taking bisacodyl, tell your doctor or pharmacist if you are allergic to it; or if you have any other allergies. This product may contain inactive ingredients, which can cause allergic reactions or other problems. Talk to your pharmacist for more details. (MED#3)

Third order entities obtained 14 percent of the occurrences in the corpus. Nouns such as any other allergies and inactive ingredients are mental phenomena which the former means another type of allergy while the latter connote unknown substance which Mackenzie (2008) emphasizes that these nouns are unobservable. Lyon (1977) explains that third-order entities can be asserted or denied, remembered or forgotten. Such activities are considered an austere 'no-no' in product warnings.

3.2.2. Pronoun

Pronoun is a class of words which are said to 'stand in place' (the meaning of the prefix pro) or 'refer back to' noun expressions (Radford, 2004). The second person pronoun YOU and possessive pronoun YOUR are used generically, referring to the warning readers or product consumers in general. Indefinitely, YOU and YOUR pronouns signal a direct and personal address to the consumers.

The study revealed that there was an occasional use of direct address in medicine products as this is manifested in the use of second-person personal pronoun. Consider the extracts.

Before taking bisacodyl, tell your doctor or pharmacist if you are allergic to it; or if you have any other allergies. This product may contain inactive ingredients, which can cause allergic reactions or other problems. Talk to your pharmacist for more details. (MED#3)

If you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take acetaminophen or other pain relievers/fever reducers. (MED#5) Five or 10 percent among 50 medicines employed direct addressing to consumers. Communicatively, these product warnings desire to establish an interpersonal relationship with the readers, one way of telling the message of the warnings. In the end, pronoun YOU serves as generic address to the product consumers or users, thereby an informal type of speech and writing.

3.2.3. Words in Field Continuum

Field highlights what the text is about (Donnell, 2010) and such typical fields could be classified as science, education, war, medicine, sports and others. To be able to describe the texts of product warnings, Halliday's field continuum (Halliday and Matthiessen, 2004) is employed as a guide. The specialized scale is classified as: everyday word, specialized language, and highly technical.

Table 4. Words in field continuum used in medicine product warnings

Words in Field Continuum	Frequency	Percentage
Everyday	15	30
Specialized	13	26
Highly Technical	22	44
Total	50	100

3.2.3.1. Everyday Language

An everyday language is an ordinary and familiar word which an average consumer can easily understand. Words are commonly known and frequently used as they are referred to concrete things rather than abstract ideas. The corpus incurred 30 percent of occurrences in the warnings.

Precautions: For external use only. Avoid contact with eyes. Do not swallow. Keep away from heat, sparks and flame. Keep container tightly closed. Keep out of reach of children (MED#46)

The results entailed that manufacturers of medicines tried to communicate with the product users in a comprehensible language. However, the limited number of percentage did not suffice the language simplicity of existing warnings.

3.2.3.2. Specialized vocabulary

Specialized word or vocabulary is a technical terminology and semi-technical vocabulary (Rizzo, 2013; Hyland, 2007; Nation, 2001; Alcaraz, 2000). It is made up of 'lexical units of various levels of specialization' (Rizzo, 2013), or a general language which acquires a specialized meaning in the discipline.

If accidentally swallowed induce vomiting and call a physician. (MED#1)

Amlodipine besilate should be used with caution in patients with hypertension, in patients whose cardiac reserve is poor, and those with heart failure since deterioration of heart failure has been noted. (MED#12)

Medically, the word 'induce' means to cause (something) to happen or exist as to give a (pregnant woman) special medicine in giving birth. Hypertension, on one hand, refers to the abnormality of blood pressure resulting to arterial blood pressure otherwise known as high blood. Such vocabulary incurred 26 percent of occurrences in the existing warnings.

The results were in the contrary of Shuy's (2002) call for the comprehensibility of product warnings. The consumers' limited knowledge on words and word retention for specialized vocabulary will become their dilemma not only in understanding the safety information but also in taking appropriate action in times of emergency.

3.2.3.3. Highly Technical

Product warnings are made available to the public; however, the identification of jargons among the cautionary texts created a mismatch in the trading context since they are considered to be a hybrid language. Highly technical words incurred 44 percent in the existing corpus.

Precaution: Citrimoxazole should not be given to patients with a history of sensitivity to it or to the sulfonamides or trimethoprim, and to infants below 6 weeks of age because of the risk of Kirnecterus from sulfonamide component. (MED#9)

Precaution: It should be given with caution to patients with glaucoma, cardiovascular disorder, diabetes mellitus, hyperthyroidism, hypertension, urinary retention, prostate hyperplasia, or pyloproduodenal obstruction. (MED#23)

Based on the results, the existing dangers are difficult to comprehend as reflected by 48 percent of vocabulary in the existing warnings containing the use of highly technical language. This goes against the Global Harmonization Standards (UN, 2013) and Consumer Act of the Philippines (1992) citation on comprehensibility in notifying the product users of existing dangers brought by medicines.

3.2.4. Evaluative Adjectives

The usage of adjectives in medicine product warnings are analyzed since these classify events or entities (Marzá, 2011) or simply depict their qualities. Likewise, product manufacturers can point out what product and warning qualities should be avoided by the consumers.

3.2.4.1. Attributive

Attributive adjectives are placed before the nouns (Marza, 2011). The extract signifies its worth in the warning discourse.

Cautions: If redness, irritation occurs, discontinue using and in case deep or punctured wounds or serious burns, consult a physician. (MED#17)

Identifying 18 percent attributive adjectives in the corpus, it was disclosed that this type of adjective will significantly persuade the consumers to keep away from product risks. It aims to help the product users in carrying out safe behavior. However, its minimal inclusion in the warning texts provides a lesser evidence of risks among consumers.

3.2.5. Adverbs

Adverbs explain where, when, and how an activity or event occurred.

3.2.5.1. Manner

Constructed by adding ly to adjectives, manner adverbs drawn its striking property as degree words (Abeille, 2003). These may be characterised by the informal communication, however, they immediately instruct the consumers on ‘what to do’ before using the medicines. Consider the extract below.

Caution: Do not swallow. Consult a physician immediately if accidentally swallowed. Do not apply in or near eyes. Not applicable for deep wounds. Keep tightly closed and store at temperatures not exceeding 30. Keep out of reach of children. (MED#11)

Manner adverbs have 12 percent appearance in the data to which the conveyed information have provided the emotional hint and the ‘intonationally’ (Abeille, 2003) of manufacturers desire for the consumers to take necessary action (immediately, tightly) in case of emergency. This promotes the sense of urgency among product warnings which consumers should follow.

3.2.5.2. Temporal

Adverb of time is linked whenever an event may occur and tells how long an incident lasted as presented in the following extracts:

Caution: Should be given with care to patients with impaired kidney or liver functions. Chronic use should be avoided. Daily use may potentiate oral anti-coagulant. (MED#2)

Caution: Alcohol warning: if you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take acetaminophen or other pain relievers/fever reducers. Acetaminophen may cause liver damage. (MED#5)

Based on MED#5 extract, temporal adverb serves as instructions to the readers on how long an event or state endures (Nguyen, 2010).

In addition, temporal adverbs like *after, before,* and *always* are used to indicate when something happens in the past, present or future.

> Warning: Shake the reconstituted suspension before using. Food drugs devices and cosmetics act prohibits dispensing without prescription. Keep in dry place, store below 25'C. (MED#36)

Based on the extract, the inclusion of temporality in product warnings reminds the consumers about the exact time frame when a medicine should be taken or avoided, hence following instructions on, before, or during the utilization of the product are specified.

Importantly, temporal adverb specifies point or boundary in time to whom an event occurs or lasts. Consider the extract below.

Citrimoxazole should not be given to patients with a history of sensitivity to it or to the sulfonamides or trimethoprim, and to infants below 6 weeks of age. (MED#9)

With the minimal instances of adverbs of manner and time which respectively incurred 14 and 18 percent in the corpus, it empirically shows that adverbs are slightly incorporated by manufacturers in writing the warnings of medicines. The minimal practice in explaining where, when and how an accident or erroneous event will occur posits limited reference in the course of product usage.

3.2.6. Modals

Modality is a category of linguistic meaning which necessitates the expression of possibility and necessity. This paper used Halliday's tenor continuum (1988) as a guide in analyzing the extracts.

Table 5. Modals used in Medicine Product Warnings

Modals	**Frequency**	**Percentage**
High	11	22
Medium	20	40
Low	19	38
Total	50	100

The modal MAY occurred 19 times or 38 percent in the warning discourse. The Writing Center of North Carolina (2013) explained that the use of modal MAY weakens the certainty of a sentence. Since *may* belongs to the lowest level of continuum, it manifests a weaker possibility that hazards might occur. The extract below is adapted for analysis.

Precautions: One ingredient in this product is acetaminophen. Taking too much acetaminophen may cause serious (possibly fatal) liver disease. Adults should not take more than 4000 ml. (4 grams) of acetaminophen per day. Daily use of alcohol, especially when combined with acetaminophen, may increase your risk for liver damage. Avoid alcohol. (MED#22)

Caution: Alcohol warning: if you consume 3 or more alcoholic drinks every day, ask your doctor whether you should take acetaminophen or other pain relievers/fever reducers. Acetaminophen may cause liver damage. (MED#5)

Though may can also express irrelevance in spite of certain or likely truth, it also produces a contradictory effect associated in using the product e.g. may cause liver damage articulates a serious health effect which requires a stronger modal.

Meanwhile, another essential finding is the emergence of medium level modals. Below is the extract.

Precautions: Contraindicated in patients known to be sensitive in penicillin. It should be used with caution in patients with known history of allergy to penicillin V.

The usage of *should* incurred 40 percent uses in the corpus which entailed that product manufacturers have their strong desire in warning the consumers. However, based on the corpus it failed to mention the nature of the hazard and possible consequences that might occur once the product is misused.

3.3. Syntactic Features

Syntax refers to the rules by which signs are combined to make statements. Considering the words of a language to be its signs, then its syntax is the rules which put signs together to make statements, ask questions, and produce other utterances.

3.3.1. Conditional sentence

According to Choudhary et al. (2010), conditional sentences describe inferences or hypothetical situations and their consequences. Traditionally, the English language carries a variety of conditional connectives to form these sentences. Having two clauses, this sentence type contains the condition clause and the consequent clause, that are dependent on each other. The extract below creates a better picture.

Keep out of reach of children. If accidentally swallowed induce vomiting and call a physician. Avoid getting into the eyes or on the mucous membrane. Discontinue use if skin redness or irritation develops. (MED#1)

Medicine product warnings attained 50 percent conditional sentences in the corpus whereby manufacturers attempted to highlight the cause brought about by wrong product usage. Moreover, the call for discontinuity of treatment will be perceived as the product's effect. This strategy facilitates adequacy, readability, and comprehensibility on determining the possible consequences brought by the product to the consumers. It immediate provides the hint to consumers on what will take place once there will be product misuse and once emergency situation occurs.

3.3.2. Conditional Connective

Declerck and Reed (2001) and Evans (2007) underscore that there are two ways in describing hypothetical situations and their consequences. Choudhary and colleagues (2010) specify that condition (P) and consequent clauses (Q) are both dependent on each other. Generally, a conditional sentence is linked and coordinated by the if phrase whereby it incurred 46 percent in the warnings. Consider the extract.

Precaution: Do not use if hypersensitive to iodine. For external use only. If irritation, redness or swelling develops, discontinue treatment and consult a doctor. Do not mix with detergents or other chemicals. (MED#24)

This result entailed that medicine safety information utilized the common strategy in presenting the cause and effect whereby condition and consequent clauses are immediately linked in the warning.

Syntactically, the condition is the subordinate clause, and the consequence is the main clause which is the common pattern of a conditional sentence. However, some of the present product warnings have the pattern of effect-cause.

Warning and Precaution: It's unsafe to use moringa if you are pregnant. It's also best to avoid moringa if you are breastfeeding. There's isn't enough information to know whether it is safe for a nursing infant. (MED#33)

The effect of using the products was not specified in the warnings. This style of writing softens the tone of the communication process perhaps warning writers assume a milder persona than the reality (Kassner, 2010). Product manufacturers fear that providing the information in a more straightforward way would cause warning readers not to buy the products. In the end, this is a confirmation of not notifying the consumers about the consequences engaged in using the consumer items.

3.3.3. Kinds of Sentences

Simple sentences in communications are generally easy to understand, as they are short and direct to the point. Below is the extract.

Precautions: Do not apply to nostrils of infants. It may cause instant collapse. Store at temperature not exceeding 30. (MED#19)

Simple sentences attained 68 percent in the corpus which manifests the manufacturers aim of making the medicine warnings simple and concise. However, the higher percentage attained by simple sentences in the corpus disclosed that too many simple sentences may end up requiring more words to say than what could be said in fewer compound statements. See the extract below.

Precautions: One ingredient in this product is acetaminophen. Taking too much acetaminophen may cause serious (possibly fatal) liver disease. Adults should not take more than 4000 ml. (4 grams) of acetaminophen per day. Daily use of alcohol, especially when combined with acetaminophen, may increase your risk for liver damage. Avoid alcohol. (MED#22)

A simple sentence is not necessarily short or simple. It can be long and involved, with many parts and compound elements. However, too much simple sentences make the warning texts verbose

and hinder the readability and comprehensibility aspects of the safety texts. It is essential to note that simple sentences provide the opportunities for consumers to move through the reading of product warnings but manufacturers should be careful in its formulation as it may lead to information confusion.

On important note, complex sentences were identified in the corpus. A complex sentence contains both a dependent and an independent clause which basically denotes that clauses are not structurally equal. Consider the extract below.

Caution: Before taking bisacodyl, tell your doctor or pharmacist if you are allergic to it; or if you have any other allergies. This product may contain inactive ingredients, which can cause allergic reactions or other problems. Talk to your pharmacist for more details. (MED#3)

Complex sentences attained 26 percent of occurrences in the corpus which shows the manufacturers attempt to produce a more informative text for consumers. As such warning, writers intend to move the warning details from a position where it is considered as a very important topic for the consumers. As such the extract highlighted that product may contain inactive ingredients, which can cause allergic reactions or other problems stated the very idea of product content which could result to allergy prioritizes the cause and effect format. This provides an immediate hint for the consumers on the possible risks brought by the product, thus a manufacturers attempt in interfacing reader-text dimension.

Wray and Jannan (2013) emphasize that content area reading should also be considered in writing safety information because only manufacturers are responsible for producing warning texts and matching those safety texts to the abilities and needs of ordinary consumers.

4. CONCLUSION AND RECOMMENDATION

The conduct of analyzing the lexical and syntactical features of medicine product warnings manifest the communicative intent of product manufacturers specifically on helping the consumers in doing and following the product precautionary measures. It can be supposed that linguistic features such as these micro and macro linguistic aspects bring a vital impact on the legal-content adequacy of medicine product warnings, thus, helping the consumers in coming out with informed decisions during the presale and post sale of the medicine products.

Considering the informational tidbits from the different medicine warning extracts, Philippine legislatures can further improve the existing product warning law through Consumer Act of the Philippines based on various research and issues associated with consumer product warnings. Significantly, the law can set the parallel guidelines or standard of reasonableness of what the product warning content should be from alert lexicon, nature of hazard, means to avoid the hazard, and consequences of not avoiding it for the business industry to follow, thus upholding the consumers' right to live in a safe and healthy milieu.

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