

# CHAPTER ONE

## INTRODUCTION

### 1.1 General Background

Language is the universal medium for conveying the common facts including complex thoughts, ideas and feeling of everyday life. No language is superior or inferior to other languages in terms of communicative values. The major function of language is to communicate. Chomsky (1957:13) states “Language is a set (finite or infinite) of sentence, each finite in length and constructed out of finite set of element”. A second/foreign language learner has to learn adequate number of vocabulary without a fail. If he is not able to do so, his effort to communicate either in spoken or in written will be meaningless. This means vocabulary plays a key role to convey the message meaningfully. Besides, some language items are easy to learn and some are difficult because of their nature of difficulty.

According to Sapir (1978:8), “Language is a purely human and non-instinctive method of communicating ideas, emotion and desires by means of a system of voluntarily produced symbols.” There is thousand of language in the world. All of them are equally important so far as their communicative function is concerned. However, some language play more dominant role in a particular place. Among them, English is an international as well as widely spoken language in the world.

English language is the only key to face challenge on various disciplines of Medical Science, Science, Economics, and Commerce as well. We strongly depend on English for our knowledge in this area. It has earned fame and popularity all over the world. It

is the language of mass media, official instruction and education in many countries.

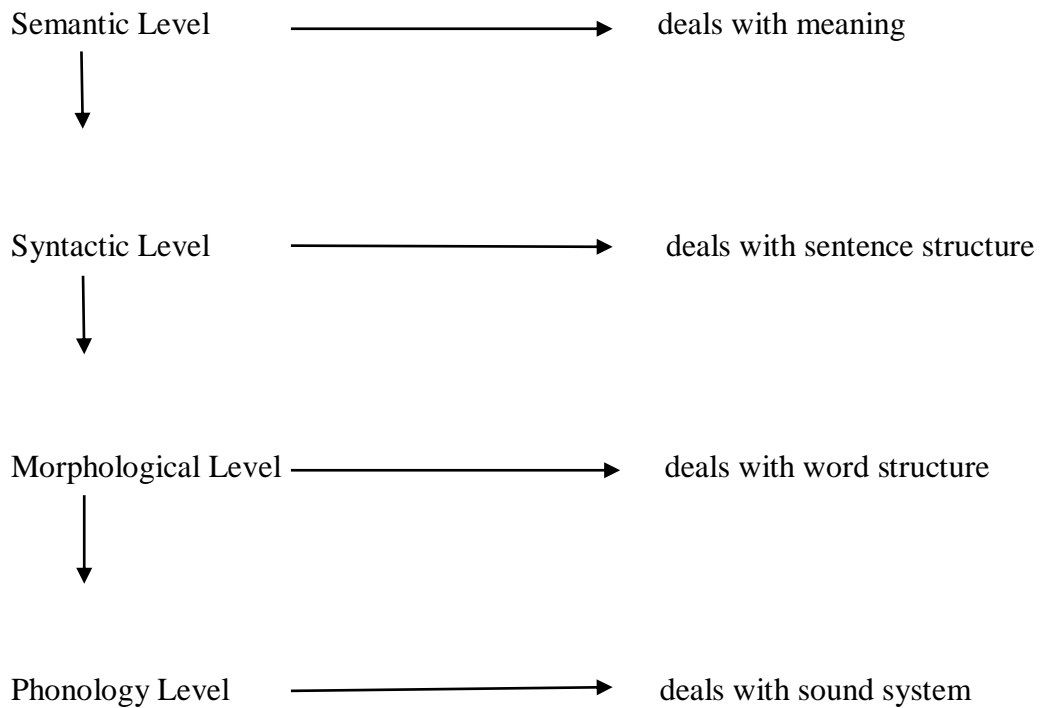
To develop one's carrier the knowledge of English is must.

Obviously, learning a second language is not an easy task. It needs a long time and effort to have mastery over all the level of a language. These levels are phonology, lexicon, Grammar and Semantics. Of these all levels, vocabulary (lexicon) is very important because a language learner begins the journey of language learning from this point. Realizing the value of the English language, the Government of Nepal has introduced it as a compulsory subject from the grade One to Bachelor Level in different disciplines. In this connection CDC (2005) states, "There has been an increasing demand for English to start at the beginning of primary education." To meet this demand the Nepal Government decided to introduce English as a subject from grade one starting the academic year 2060 B.S.

### **1.1.1 Level of Language**

The most widely recognized level of languages are phonology, grammar, morphology and semantics, but often phonetics is distinguished from phonology, lexis, semantics, morphology and syntax are seen as separate levels within grammar. Pragmatics is also sometimes described as a level of language.

There are four levels of language (often called linguistic levels). They are shown in the table as follows:



(Katamba, 1993: 4)

The levels are assumed to be ordered in hierarchy, with phonology at the bottom and semantics at the top. The short description of each level is given below:

### **I Phonological Level**

Phonology studies how speech sounds are structured or patterned in a particular language. Besides, it describes contrastive relationship of the phonemes of a language, their distribution, and the articulator features of their allophones.

Each language has its own sound system which is itself complicated in term of their functioning. Phonology deals with the sound system of languages and the functions of sounds. Phonology, thus, differs from phonetics in that phonetics studies the feature of all human speech sound.

## **II Morphological Level**

Crystal (1996:249) defines, “The branch of linguistics which studies the structure of forms of words.” It deals with the internal structure of words such things as inflection for number, gender, case, tense, aspect, etc; and derivation to form new words. It studies, for example, how the forms take, took, taking and takes differ from one another and how the forms national, unlimited, lively, etc; are derived from the forms nation, limit and live respectively. Similarly, According to Lyons (1968:52), “Morphology deals with the internal structure of words.” This simply means how words are formed in morphology. Thus, it studies the internal structure of words, morphemes, their types, function and formation. Likewise, Katamba (1993:19) defines, “Morphology is the study of word structure.”

## **III Syntactic Level**

“In linguistics, syntax refers to the study of the principles and processes by which sentences are constructed in particular languages” (<http://en.wikipedia.org>).

It studies of the rules that govern the ways in which words combine to form phrases, clauses, and sentences in poem. Syntactic is of or relating to or conforming to the rules of syntax; ‘the syntactic rules of a language’ composed in the poem. It deals with the sentence structure. In Syntactic level, we study how words are combined to form larger units of language, viz. phrases, clauses and sentences.

## **IV Semantic Level**

Palmer (1976:1) says “The term ‘semantics’ is the recent addition to the English language”. **Semantics** is the technical term used to refer to study of meaning and deals

with the meaning of linguistics forms (as quoted in Guragai, 2006:15). It tells us, for example, that the sense relationship between the words big and large under the headings synonymy. Similarly, it studies big and small under the heading antonym. **It is a systematic study of what meaning is and how it operates.**

### **1.1.2 Defining vocabulary**

Broadly speaking, vocabulary refers to the words that we use in our day to day life for expressing our thoughts and feelings. Regarding the vocabulary Celce-Murcia and Larsen-Freeman (1983:29) say “we take a considerably broader view of the Lexicon, we consider it to comprise not only single words but also words compounds and conventionalized multi words forms.” Similarly, Longman Dictionary of Applied Linguistics (1985:307) defines the term vocabulary as “a set of lexemes including single words compound words and idioms.” A word is the most important unit of language. No one can express their thoughts and feelings if he doesn’t know the words of the languages. Regarding the importance of vocabulary Harmer (1991:153) defines, “if language structures make up the skeleton of language. Then, it is vocabulary that provides the vital organs and the flesh.” For effective communication in the target language, only the knowledge of the structure of that language is not sufficient. It is the vocabulary which is much more important as it provides the vital organs and flesh on the structure of language.

Cambridge International Dictionary of English (1995: 1628) defines vocabulary as “all the words used by a particular person or all the words which exists in a particular language or subject.” The Oxford English Dictionary (1998:721) defines vocabulary as “a collection or list of words with brief explanation of their meanings; now esp. a list of this kind given in an elementary grammar or reading- book of a foreign

language.” Similarly, Webster’s New Collage International Dictionary (2000:1600) defines vocabulary as “a list of words and often, phrases, abbreviations, inflectional forms, etc; usually arranged in alphabetical order and defined or otherwise identified, as in the dictionary or glossary.” In Oxford Advanced Learners Dictionary (2000:1447), the term vocabulary has been defined as “all the words known to a person or used in a particular book, subject etc.”

By Definition we can say that vocabulary provides the vital organs and flesh on the skeleton (structure) of language; the teaching of it is of great importance

Vocabulary is such a vital aspects of language in the lack of which it is rather difficult to communicate even if someone has a good knowledge of the system of language in questions. There is sense in which learning a foreign language as basically a matter of learning the vocabulary of that language. So, there is a great need of systematic analysis and evaluation of vocabulary.

### **1.1.3 Word Classes**

Traditional grammarians have classified words into different ‘parts of speech’ and defined each part of speech in notional terms. According to traditional grammar (Nesfield: 1965), there are eight parts of speech: noun, pronoun, adjective, verb, adverb, preposition, conjunction and interjection. For example, defines these parts of speech are as follows:

- i) “A noun is a word used for naming person or things” (1968:8).
- ii) “A pronoun is a word used instead of a noun or noun equivalent” (1965:34).
- iii) “An adjective is a word used to qualify noun or pronoun” (1965:37).

iv) “A verb is a word used for saying something about some person or things” (1965:47).

v) “An adverb is a word used to add something to meaning of a verb, an adjective or another adverb” (1965:31).

vi) “A preposition is a word used with a noun or a pronoun to show how the person or thing denoted by the noun or pronoun stands in relation to something else” (1965:52).

vii) “A conjunction is a word used to join words or sentences” (1965:65).

viii) “An interjection is a word used to express some sudden feeling” (1965:70).

The definitions provided by traditional grammarians are largely notional and extremely vague. It is almost impossible to judge from these definitions whether a particular word is a noun, verb or an adjective.

Likewise, articles (a, an and the) possessives (his, her, their, your, my, our) demonstrative (this, that, these, those) and quantifiers (all, some, neither, etc.) are traditionally included in adjective. But, they are different from most adjective in the sense that firstly they precede adjectives in sentence, secondly most of them are never used predicatively and lastly they have no comparative and superlative forms.

Modern grammarians classify words into ‘word classes’ by considering their formal structural (i.e. morphological properties) and functional characteristics (i.e. syntactic properties) (Nesfield: 1965). We should assign words to various classes considering how they are built and what role or roles they play in the structure of phrase separately in brief.

## **I.Noun**

Words are identifiable as nouns on the basis of their syntactic and morphological properties. Adams (1973:17) says, “Among the features that we expect of nouns are: the ability to take the plural and genitive inflection, to take certain characteristic suffixes like –er, -ance, -ness, -ism, to be preceded by determiners, like a, the, this, my, another, to follow prepositions to all as the subject or the object of sentence.

Typical derivational suffixes that form such nouns are:

- age: coverage, percentage, etc.
- ance: appearance, utterance, reluctance etc.
- ation: information, confirmation, reservation etc.
- dom: wisdom, kingdom, boredom etc.
- ee: examinee, employee, payee etc.
- ence: difference, preference, reference etc.
- er: farmer, preacher, teacher etc.
- ess: actress, princess, tigress etc.
- hood: brotherhood, childhood etc.
- ism: idealism, organism, socialism etc.
- ist: socialist, feminist, specialist etc.
- ment: betterment, amendment, statement etc.

## **II.Pronoun**

A pronoun can occupy the same place as a noun or noun phrase in a sentence.

Therefore, the simplest test for the identification of a pronoun is to check if it can replace a noun or a noun phrase. For example: the boy followed the girl = He followed her where ‘the boy’ changed into ‘he’ and, ‘the girl’ changed into ‘her’.

Pronoun can be classified into various sub- classes such as,



Personal pronouns	he, she, it, they etc.
Possessive pronouns	his, my, our etc.
Demonstrative pronouns	this, that, these etc.
Reflexive pronouns	myself, ourselves etc.
Interrogative pronouns	what, which, who etc.
Distributive pronouns	all, both, each etc.
Indefinite	some, any, so etc.

### **III.Adjective**

Adjectives, in general, can occur within a noun phrase as its constituent. Adams (1973:17) says, “Adjectives are identified by such characters as the ability to assume comparative and superlative forms, to be preceded by adverbs of degree, like very...”

The following are some typical derivational suffixes of adjectives:

-able/-ible:	reasonable, visible etc.
-al:	formal functional etc.
-ic/-ical :	economical, historical etc.
-ish:	selfish, greenish etc.
-ive:	active, effective etc.
-less:	hopeless. endless etc.
-ous:	continuous, courageous etc.
-y:	sleepy, dirty etc.

### **IV. Verb**

The class of verb has a specific function in a sentence. It is the element which is used as the minimal predicate of a sentence, co-occurring with a subject e.g. He came, Birds fly etc. Adams (1973:21) states, “We may say that verbs are typically associated with reference to time, with activity and changing conditions.”

There are three derivational suffixes they are typical to verbs alone, for example.

-en: blacken, soften, lengthen, etc.

-ify: beautify, classify, simplify, etc.

-ise/-ize: realize, organize, analyze, etc.

## V. Adverb

An adverb has two major functions: to serve as a constituent in the structure of a sentence, and to serve as a modifier of the head in an adjective phrase or an adverb phrase. As constituents of sentence, adverbs function as adverbials expressing such meaning as the time, place, manner and degree of the verbal action. For example:

He plays football everyday. (Time)

She is waiting for you outside. (Place)

He completed the work successfully. (Manner)

His request was absolutely refused. (Degree)

Many verbs can be identified on the basis of typical derivational suffixes. For example:

-ly: really, completely, truly, etc.

-wards: afterwards, upwards, etc

-wise: clockwise, lengthwise, level wise

## VI. Preposition

A preposition is a functional word belonging to a closed class whose form is invariable.

Syntactically, it is always followed by a noun, a pronoun or a noun phrase in English.

For Example:

He came to school yesterday.

My father bought a bicycle for me

## **VII. Conjunction**

Conjunctions like prepositions are closed- class words which are formally invariable and serve a purpose of linking words, phrase and sentence. for example:

Poor but honest.

Bread and butter.

From functional pointing of view there are two types of conjunctions: coordinating and subordinating conjunctions. Conjunctions such as and, but, or, so, are coordinating conjunctions and conjunctions such as because, before, while, although, etc, are the example of subordinating conjunctions.

## **VIII. Interjection**

Interjections are closed-class items, which are very limited in number, and most of which are monosyllabic, they are used only to express emotions such as joy, pleasure, surprise, pain, etc. for example:

Hey, come and look at this!

Oh, how horrible!

Wow, that car certainly goes fast!

## **1.2 Literature Review**

In the department of English education, some studies have been carried out on the analyses of textbook and some on vocabulary achievement. Some of the studies which are more or less related to this study can be observed as follows:

**Chundal (1997)** has, in his M.Ed. thesis, studies on “English vocabulary achievements of the student of Grade Six”. And, findings of the study are stated descriptively. His study has shown that the students’ English vocabulary achievement was poor in total. The boys’ vocabulary achievement was better than that of the girls’. Similarly, the students from urban areas were better than students from rural areas.

**Khatri (2000)** has carried out a study on “English vocabulary (noun and verbs) achievement of the student of grade Eight”. The percentage of the total achievement of the students in nouns and verbs were 67.9% and 59% respectively.

**Tiwari (2001)** has studied, “The achievement of English vocabulary by the students of Grade 10”. His study has shown that 43% of vocabulary items were quite difficult for the level of grade. And 52% of the total of the students were below the average.

**Dahal (2002)** has analyzed, “The new English textbook for Grade ten in terms of physical aspects, organization of the materials and its presentation”. His study was positive towards the organization and presentation of the materials but it was negative on the physical aspects to the book.

**Tiwari (2004)** has studied, “The vocabulary used in English textbook for the Grade four”. His study has shown that 546 different vocabulary items have been used in the textbook. The auxiliary verb is has the highest number of frequency and both definite and indefinite articles were found to be used in the textbook.

**Dawadi (2004)** has analyzed, “The new English textbook for Grade seven”. Her objective of the study was to examine the qualities of Grade seven English textbook in the physical and academic aspects her study shown that the subject matter was free

from sex-basis. It was interesting for the students to read and it provided new information. It did not contain all contents expected by curriculum.

**Bohora (2004)** carried out a research on “A Descriptive study on the English textbook for grade one”. He found that 217 vocabulary items were found in textbook presented a list of only 183 vocabularies. The vowel sound /d/ and consonant sound /z/ were not found in the language used in the textbook.

### **1.3 Objectives of the Study**

The objectives of the study are as follows:

- i) To study the vocabulary items used in the medical science in terms of: origin, parts of speech, frequency, syllable structure, morphological structure and complexity
- ii) To enlist some pedagogical implications.

### **1.4 Significance of the Study**

Vocabulary works as the building blocks of language learning. It includes the use of single words, compound words, idioms and the meaning in oral or written discourse. So, the researcher hopes that this study will be significant in the following ways:

- i) This research will provide valuable insights to the people who are interested in analyzing vocabulary items.
- ii) It will be beneficial to syllabus designers and textbook writers.
- iii) It will be helpful in determining whether or not the vocabulary are suitable for the very grade.
- iv) This study will be fruitful to school teachers, especially to the medical practioners.

v) This will be useful to the teacher trainers and students too.

vi) This study will also act as a guide for further study on vocabulary analysis.

### **1.5 Definition of Specific Terms**

**Abbreviated forms:** Abbreviated forms refer to a short form of words e.g. T.V.

**Affix:** A letter a sound, or group of letter or sounds, which is added to a word, and which changes the meaning or function of the word.

**Complex words:** Polymorphemic words with at least two bases, which are both words, or at any rate, root morphemes.

**Constant cluster:** The sequence of two or more constant phonemes at the beginning or final of syllable.

**Constituent:** A basic term, in grammatical analysis for a linguistic unit, which is a functional component of a larger construction.

**Contracted forms:** The items, which have become shorter due to the deletion of some letters.

**Conventionalized multiword forms:** Group of words that occur and serve specific functions.

**Derivation:** The formation of new words by adding affixes to other words or morphemes.

**Frequency:** The reoccurrence of words.

**Lexemes:** Lexemes are the vocabulary items that are listed in the dictionary.

**Monomorphemic words:** Words with only one morpheme (free morpheme)

**Monosyllabic words:** A word containing a single syllable is called monosyllabic word

**Morpheme:** A minimal unit of grammatical description in the sense that it cannot be segmented can't further at the grammatical level of analysis.

**Parts of speech:** A term used to describe the different types of words that are used to forms of sentences, such as noun, verb, adjective, adverb, preposition, conjunction, interjection, etc

**Polymorphemic words:** Words with more than one morpheme.

**Polysyllabic word:** A word containing more than one syllable is called polysyllabic word

**Root:** It is the base form of a word, which can't be further analyzed without total loss of identity.

**Suffix:** An affix attached after a root or stem or base such as -ly as in quietly

**Syllable:** A unit of pronunciation typically larger than a single sound and smaller than a word.

**Words form:** Physical realizations or representations of lexemes.

## 1.6 Medical Terminologies

Medical terminology is a language for accurately describing the human body and associated components, conditions, process in a science based manner. Some examples are; R.I.C.E. trapezium and lentissimo dorsa. It is to be used in the medical

and nursing fields. Their systematic approach to word building and term comprehension is based on the concept of; (a) word roots, (b) prefixes, and (c) suffixes. The word is a term derived from a sources language such Greek and Latin and usually describes a body part. The prefix can be added in front of term to modify the word root by giving additional information about the location of an organ, the number of parts, of time involved. Suffixes are attached to the end of a word root to add meaning such as condition such as condition, disease process, or procedure.

In the process of certain medical terminology, certain rules of language apply. These rules are a part of language mechanics called linguistics. So, when a term is developed, some medical process is applied. The word root is developed to include a vowel sound following the term to add a smoothing action to the sound of the word a word when applying a suffix. The result is the formation of a new term with a vowel attached {word root +vowel} called a combing form. In English, the most common vowel in the formation of the common vowel used in the formation of the combing form is the letter -o-, added to the word root.

Prefixes do not normally require further modification to be added to a word root because the prefix normally ends in a vowel or vowel sound, although in some cases they may assimilate slightly and an in- may change into im- or, sym-. Suffixes are categorized as either (a) needing the combing form, or (b) not needing the combing form since they start with vowel.

Decoding the medical term is an important process, once experience is gained in the process of forming and decoding medical terminology, the process begins to make sense and becomes easier. One approach involves breaking down the word by evaluating the meaning of the first, then prefix, and finally the word root. This will



generally produce a good result for the experience health care professional. When in doubt, the result should be verified by a medical dictionary. The process of learning a new language, such as medical terminology, is a challenging, yet attainable goal as the basic rules –once learned-make the process easier.

One quick online reference is a dictionary search engine. The allows one to enter a medical term into a dialogue box and initiate a search. There are also numerous online medical dictionaries to select from. Once a term is located, the response will be subdivided into several basic formats, including general usage, medicine, Law, Business, and others.

The use of medical dictionary or internet search engine is most helpful in learning the exact meaning of medical term. However, if the basic concepts of word building are understood, many words are understandable to the student of medical terminology.

In forming or understanding a word root, one needs a basic comprehension of the term and the source language. The study of the origin of words is called etymology. For example, if a word was to be formed to indicate a condition of kidneys, there are two primary roots –one from Greek (nephr} Renal failure would be a condition of kidneys, and nephritis is also a condition, of the kidney. To continue using these terms, other combination will be presented for the purpose of examples; the term ‘supra –renal is a combination of the prefix supra –“nephrologists” combines the root word for kidney to the suffix – ologist with the resultant meaning of “one who studies the kidneys.”

In medical terminology, the word root is not usually capable of standing alone as a complete word within a sentence. This is different then most words root in modern

English. The medical word root is taken from a different source language, so it will remain meaningless as a stand-alone term in a sentence. A suffix or prefix must be added to make a usable medical term. For example the term for “cornering the heart” is ‘cardiacus’ from the Greek cardiac. If a person is suffering from a heart related illness, the statement, ‘the patient suffered acaridae event’ would not make sense. However, with the addition of a suffix –ac, the statement would be modified to read, ‘The patient suffered a cardiac event’ are capable of standing alone in a sentence.

An additional challenge to the student of medical terminology is that formation of the plural of a word must be done using the rules of forming the proper plural form as used in the source language. This is more difficult than in English, where adding –s or –es is the rule. Greek and Latin each have differing rules to be applied when forming the plural form of the word root. Often such detail can be found using a medical dictionary.

There is also another rule of medical terminology to be recognized by the student.

When more than one body parts is used in the formation of a medical term, the individual word root are joined together by using the combining form using the letter –o- to indicate the joining together of various body parts. For example if there is an inflammation of the stomach and intestine, this would be written as gastro –and enter –plus –it s, gastroenteritis. In this example, the-o- signifies the joining together of two body parts.

Medical terminology often uses words created using prefixes and suffixes in Latin Ancient Greek. In medicine, their meanings, and their etymology, are informed by the language of origin. Prefixes and suffixes, primarily in Greek –but also in Latin, have droppable - o - medical roots generally go together according language: Greek

prefixes go with Greek suffixes and Latin prefixes with Latin suffixes. Although it is technically considered acceptable to create hybrid words, it is strongly preferred not to mix different lingual roots. Examples of well-accepted medical words that do mix lingual roots are neonatology and quadriplegia.

## CHAPTER TWO

### METHODOLOGY

The researcher adopted the following methodology to accomplish the present study.

#### **2.1 Source of Data**

To accomplish the present study, the researcher used only the secondary source of data.

#### **2.2 The Population of the Study**

The population of the study consists of different issues from the two different books of **PCL Nursing, Community Health Nursing and Behavioral Science, Psychiatric Nursing**, up to unit three only. Altogether 589 different medical terminologies are the population of the study.

#### **2.3 Sampling Procedure**

The researcher has collected the data applying stratifying sampling procedure. The vocabularies from the two different textbooks **up to unit three** of PCL Nursing have been concluded. Altogether 589 terminologies have been dealt here.

#### **2.4 Tools for Data Collection**

The main tool for this research study was observation. The researcher judged only the medical terminologies in terms of major word class only to get the required information.

## 2.5 Process of Data Collection

The researcher followed the given stepwise processes of data collection while carrying out the research.

- i. The researcher listed all the vocabulary items used in the textbook of PCL Nursing, entitled **Community Health Nursing and Behavioral Nursing, Psychiatric Nursing**. Except the vocabulary items used in tips to the teacher.
- ii. The preliminary study related to the topic was done by consulting different books, websites, researches, etc.
- iii. The observation was done based on medical terminologies found in the texts of Community Health Nursing and Behavioral Nursing, Psychiatric Nursing (up to unit three only).
- iv. The medical terminologies was analyzed and interpreted based on the major word class (*Noun, Verb, Adjective and adverb*).
- v. The researcher counted the frequency of occurrence of each and every vocabulary items of the major word class by the use of stratifying sampling procedure.
- vi. The researcher has analyzed the morphological structure of medical terminologies in terms of monomorphic and polymorphic.
- vii. The researcher analyzed the syllable structure and complexity of medical terminologies in terms of heavy and light syllable and their origin respectively.
- viii. The collected items were tabulated and analyzed and interpreted descriptively using simple statistical tools like percentage.

## **2.6 Limitation of the Study**

The study was limited in the following ways:

- i. The study was basically limited to the vocabulary items used in the textbook for PCL nursing, 'Community Health Nursing and Behavioral Nursing, Psychiatric Nursing' up to unit three only.
- ii. The study was limited to the vocabulary items in terms of origin, the parts of speech, frequency of occurrence, syllable structure and morphological structure and complexity.
- iii. The study was limited only in the major word class (Noun, Verb Adjective and Adverb).
- iv. The study was limited to study only the medical terminologies which are found 589 in number in two different books.

## CHAPTER THREE

### ANALYSIS AND INTERPRETATION

The research is an attempt to study vocabulary items used in medical science. So, under this heading the researcher has analyzed the vocabulary items (major word class only) in terms of their origin, parts of speech, frequency of occurrence, syllable structures, morphological structures and complexity.

#### 3.1 The Vocabulary Items in Terms of their Origin

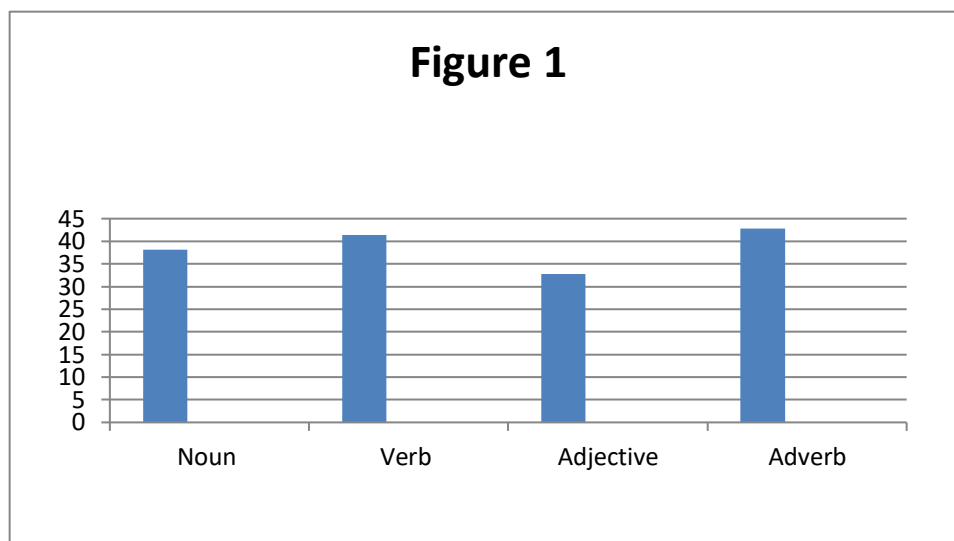
While analyzing the data, the researcher has found the medical terminologies derived from Greek and Latin which are shown in the table as follows:

**Table 1**

**Origin of Vocabularies**

Parts of Speech		Total no. of words	A / GK	Per %	Latin	Per %
1	Nouns	314	194	61.78	120	38.21
2	Verbs	168	98	58.33	70	41.33
3	Adj.	58	39	67.24	19	32.75
4	Adv.	49	28	57.14	21	42.85
Total		589	359		230	

**Figure 1**  
**Origin of Vocabulary**



The above table shows that there are 589 vocabularies. Of them 314 vocabulary items are nouns. Most of the words are derived from Ancient Greek and Greek. It covers the 61.78 percentage. It means, 194 out of 314 nouns come from ancient Greek and Greek. Similarly, 120 verbs or 38.21 percent verbs are derived from Latin and 58.33 percent verbs out of 168 are derived from Greek and 41.66 percent from Latin. In case of adjectives, 39 adjectives out of 58, 67.24% are derived from Greek and 19 out of 58 adjectives are derived from Latin. Similarly, 28 out of 49 adverbs are from Greek and 21 out of 49 are from Latin (See Appendix – 1).

### **3.2 The Vocabulary Items in Terms of the Parts Of Speech**

There were 589 different words found to be used belonging to different parts of speech. The numbers of vocabulary items belonging to different parts of speech are presented in the following table:



**Table 2**  
**Vocabulary Items in Terms of Parts of Speech**

SN.	Parts of speech	No of words	Percentage
1	Nouns	314	45.31
2	Verbs	168	24.24
3	Adjectives	58	8.36
4	Adverbs	49	7.07

The above table shows that there are 314 nouns used in the texts which have covered 45.31%. Similarly out of 693, there are 168 (14.24%) verbs, 58 (8.36%) adjectives, 49 (7.07%) adverbs.

### **3.3. The Vocabulary Items in terms of the Frequency of Occurrence**

The data was analyzed in terms of frequency of occurrence under the following sub-heading:

#### **3.3.1 Frequency of the occurrence of noun**

While counting the frequency of occurrence of nouns, altogether 314 vocabulary items belonging to nouns were found to be used in the text. Among them the nouns which are repeated more than 5 times are mentioned with their frequency of occurrence in the following table.

**Table 3**  
**Frequency of Noun**

SN.	Nouns	Singular	Plural	Frequency
1	Microgram	5	6	11
2	Calcium	5		5
3	Instruction	7		7
4	Composition	17		17
5	Lactating	13		13
6	Pregnant	17		17

7	Patient	16		16
8	Neuron- muscular	7		7
9	Baby	3	7	10
10	Adult	3	8	11
11	Severe	6		6
12	Inflection	5		5
13	Absorption	5		5
14	Physician	5	6	11
15	Pharmacy	4	7	11
16	Clinic	5		5
17	Prescription	6		6
18	Sensitivity	8		8
19	ML	5		5
20	Tablet	4	4	8
21	Ulcer	5		5
22	Reaction	6		6
23	Injection	6		6
24	Nicotinic Acid	6		6
25	Folic Acid	5		5
26	Blood Pressure	5		5
27	Uric – Acid	5		5
28	Urinary drug	5	3	8
29	Medicine	5	2	7
30	Price	5		5
31	Practitioner	4	3	7
32	Place	4	3	7
33	Ache	5		5
34	Ambulance	5		5
35	Amnesia	5		5
36	Amputation	5		5
37	Anemia	5		5
38	Anti-depressant	6		6

39	Appointment	5		5
40	Arthritis	5		5
41	Asthma	5		5
42	Bacteria	5		5
43	Bedsore	5		5
44	Biopsy	5		5
45	Blood count	5		5
46	Blood donor	5	2	7
47	Brace	5		5
48	Bruise	5		5
49	Section	5	2	7
50	Cancer	6		6
51	Resuscitation	5		5
52	Cast	5		5
53	Chapel	5		5
54	Chaplin	5		5
55	Chemotherapy	3	1	4
56	Chicken pox	5		5
57	Coroner	6		6
58	Critical condition	6		6
59	Cyst	6		6
60	Deficiency	6	2	8
61	Dementia	6		6
62	Diabetes	5		5
63	Diagnosis	6		6
64	Discomfort	6		6
65	Emergency room	3	3	6
66	Family history	6		6
67	Fever	9		9
68	Flu	7		7
69	Fracture	6	3	9
70	Germ	5	6	11

71	Growth	5		5
72	Heart attack	9		9
73	HIV	9		9
74	Life	3	6	9
75	Illness	5		5
76	Immune – system	5	3	8
77	Incision	6		6
78	Infant	5	3	8
79	Infection	5	6	11
80	Inflection	6		6
81	Injury	7		7
82	ICU	7		7
83	IV	6		6
84	Lab result	6		6
85	Lab	6		6
86	Life support	6		6
87	Medical school	7	2	9
88	New born	8		8
89	OR/ Operating room	5	4	9
90	Operation	4	3	7
91	Pain killer	7		7
92	Pain reliever	7		7
93	Physician			
94	Poison	6		6
95	Privacy	7		7
96	Radiation	9	6	15
97	Residency	7	4	11
98	Resident	5	4	9
99	Routine	5	2	7
100	Scrub	5	4	9
101	Second opinion	5		5
102	Seizure	5	4	9

103	Shock	6	6	12
104	Spasm	5		5
105	Specialist	6	5	11
106	Sprain	6		6
107	Stable	7		7
108	Sting	6		6
109	Stress	6		6
110	Swelling	9		9
111	Symptom	5	7	12
112	Temperature	5	3	8
113	Test – result	6		6
114	Therapy	7		7
115	Transplant	7		7
116	Ultra sound	6	1	7
117	Umbilical	9		9
118	Umbilical cord	9		9
119	Urine sample	7		7
120	Virus	16		16
121	Vein	10		10
122	Visiting hours		6	6
123	Ward	11		11
124	Wheel chair	9	6	15
125	Wound	10	11	21
126	X – Ray	10		10
127	Hardness	6		6
128	Softness	7		7
129	Smoothness	7		7
130	Connection	6	2	8

The above table shows that 130 out of 314 nouns are repeated more than 5 times. Less than 5 times repeated words are not mentioned in the table. Only the medical terminologies are focused and presented. Out of 130 words, the word ‘**wound**’ is

repeated 21 times, ‘**composition**’ and ‘**pregnant**’ are repeated 17 times respectively and like, ‘**patient, viruses**’ are repeated 16 times and so on.

### 3.3.2 Frequency of Occurrence of the Verbs

Altogether 168 vocabulary items related to verbs used in the medical science. Verbs with their frequency of occurrence are presented in the following table. The verbs which are repeated more than 6 times are only mentioned in the research.

**Table No 4**  
**Frequency of Occurrence of the Verbs**

S.N	Verbs	Freq
1	Take	17
2	Do	17
3	Do not	19
4	Authorized	17
5	Sold	16
6	Manufactured	12
7	Keep	13
8	Contains	13
9	Registered	9
10	Vomiting	15
11	Bleeding	15
12	Lactating	16
13	X – Ray	6
14	Sting	6
15	Sprain	6
16	Scrub up	6
17	Prescribe	9
18	Operate on	9
19	Immunize	9

19	Immunize	9
20	Amputate	7
21	Ache	6
22	Established	7
23	Documented	8
24	Development	6
25	Lasting	7
26	Obsolete	7
27	Known	6
28	Opened	11
29	Anatomical work	6
30	Practice	6
31	Observe	7
32	Respect	6
33	Attempts	7
34	Understanding	8
35	Improved	8
36	Pronounced	8
37	Towering	7
38	Considered	7
39	Associated	7

40	Training	7
41	Included	9
42	Interact	7
43	Given	7
44	Describe	8
45	Assumes	7
46	Aspiring	8
47	Performed	8
48	Alludes	6
49	Writing	16
50	Found	16
51	Treatment	15
52	Functioned	11

53	Finding	13
54	Dedicated	11
55	Healing	5
56	Induced	6
57	Received	6
58	Fulfilled	11
59	Provided	11
60	Controlled	9
61	Believed	8
62	Devoted	7
63	Arranged	7
64	Served	6

The above table displays that only the main verbs frequency is calculated which are repeated more than 5 times, the word, ‘do **not**’ has the highest frequency. It has occurred 19 times. The words ‘**do**’ take authorized used 17 times. The word ‘**lactating**’ and ‘**sold**’ have the 16 times frequency. Similarly the verbs like **bleeding vomiting, treatment** have the 15 times frequency. The Auxiliary verbs are not mentioned in the table but they have the highest number of frequency among all verbs. Especially ‘**is**’ is more frequently used than other auxiliaries.

### 3.3.3 Frequency of Occurrence of the Adjectives

There were 58 vocabulary items belonging to adjectives found to be used in the text book. Adjectives found in the text are presented in the following table with their frequency:

**Table5**  
**Frequency of Adjective**

SN.	Adjectives	Freq
1	Abnormal	19
2	Acute	15
3	Anemic	14
4	Benign	14
5	Breech	12
6	Broken	11
7	Deaf	8
8	Dehydrated	7
9	Dislocated	7
10	External	6
11	False Negative	5
12	Fatal	5
13	fractured	5
14	Genetic	4
15	ill	3
16	Inconclusive	3
17	Inflamed	3
18	Internal	3
19	Itchy	2
20	Life threatening	2
21	Light hearted	2
22	Malignant	2
23	Numb	2
24	Paralyzed	2
25	Prenatal	2
26	Private	2
27	Sore	2
28	Stressed	2
29	Swollen	2

30	Tender	2
31	Unconscious	2
32	Wounded	2
33	Yellow	2
34	Absent	1
35	Alphabetical	1
36	Beautiful	1
37	Different	1
38	Double	1
39	Fair	1
40	False	1
41	Final	1
42	God	1
43	Great	1
44	Hard	1
45	Interesting	1
46	Left	1
47	Near	1
48	Rich	1
49	Ripe	1
50	Sad	1
51	Same	1
52	Soft	1
53	Spare	1
54	Suitable	1
55	Sunny	1
56	Sure	1
57	Thin	1
58	Tired	1



The above table indicates that the adjective ‘**abnormal**’ has the highest number of frequency. It has occurred 19 items in the textbook. Out of 58 adjectives, 25 (43.10%) different adjectives have occurred only 1 item in the textbook. Among three degrees of comparison of adjectives (i.e. positive, comparative and superlative degree) only positive degree of adjective was found to be used in the textbook. This fact shows that the different adjectives have been emphasized in each Grade. The great disparity is found in the total number of adjectives.

### 3.3.4 Frequency of Occurrence of the Adverbs

There were 49 vocabulary items belong to adverbs found to be used in the textbook. Adverb found in the textbook are tabulated with their frequency of occurrence in the following way.

**Table 6**  
**Frequency of Adverbs**

S.N	Adverbs	Freq.
1	Where	24
2	When	19
3	There	18
4	Not	17
5	O’ clock	14
6	Very	13
7	Yesterday	13
8	Why	12
9	How	8
10	Down	7
11	Orally	7
12	Too	5
13	Well	5
14	Again	4

15	Always	4
16	Away	4
17	Both	4
18	Enough	4
19	Now	3
20	Also	3
21	Fast	3
22	Just	3
23	Last	3
24	Then	2
25	Ago	2
26	Already	2
27	Here	2
28	A lot	2
29	Quickly	2

30	Still	2
31	Tomorrow	1
32	At last	1
33	Back	1
34	Correctly	1
35	Eagerly	1
36	Carly	1
37	Everyday	1
38	Finally	1
39	Happily	1
40	Later	1

41	Nowhere	1
42	One day	1
43	Only	1
44	Probably	1
45	Quite	1
46	Really	1
47	Straight	1
48	Swiftly	1
49	Together	1

The above table shows that the adverbs **where** has the highest number of frequency. It has occurred 24 times in the textbook. Out of 49 adverbs, 18 (36%) adverbs have occurred only one time in the textbook. Some words such as **yesterday** and **tomorrow** have been used both as a noun and an adverb in the textbook. As an adverb, the frequency of **yesterday** and **tomorrow** is 13 and 1 time respectively.

### 3.4 Syllable Structure of the Vocabulary

According to Abercrombie (1967), "Syllable is the unit of pronunciation which can also be classified according to syllable weight." The researcher has studied the terminologies in case of syllable structure in terms of their weight: light and heavy syllable and shown in the following table.

**Table 7**

**Syllable Structures of Vocabularies**

<b>S.N.</b>	<b>Parts of Speech</b>	<b>Heavy</b>	<b>Percent</b>	<b>Light</b>	<b>Percent</b>
1	Noun	205	65.28	109	34.71
2	Verb	113	67.26	55	23.73
3	Adjective	37	63.79	21	36.20
4	Adverb	31	63.26	18	36.73
Total		386		203	

The above table shows that out of 314 nouns, 205 (65.28%) are found in heavy syllable and 109 (34.71%) nouns are found in light syllable. Similarly, out of 168 verbs 113 (67.26%) are found in heavy syllable and 55 (32.73%) are found in light syllable. In case of adjectives, out of 58, 37 (63.79%) adjectives are heavy and 21(36.20%) are found in light syllable. Out of 49 adverbs 31 (63.26%) are heavy and 18 (36.73%) are found to be light syllable.

**3.5 Morphological Structure of the Vocabulary**

While analyzing the morphological structure of the vocabulary, the researcher has found the following result in terms of mono morphemic and polymorphic sub-headings.

**Table 8**

**Morphological Structure of the Vocabulary**

<b>S.N</b>	<b>Parts of Speech</b>	<b>Total</b>	<b>Monomorphic</b>	<b>Percent</b>	<b>Polymorphic</b>	<b>Percent</b>
1	Noun	314	231	84.07	83	15.93
2	Verb	168	86	50.84	82	49.6

3	Adjective	58	40	68.96	18	31.03
4	Adverb	49	36	73.47	13	26.53
Total		589	403		196	

The above table shows that out of 314 nouns 231(84.07%) nouns are monomorphic and 83 (15.93%) nouns are polymorphic. Similarly, out of 168 verbs 86 (50.84%)are monomorphic and 82 (49.6%) are polymorphic. In case of adjective, out of 58 adjectives 40 (68.96%) are found monomorphic and 18 (31.03%) are polymorphic. Out of 49 adverbs 36 (73.47%) are monomorphic and 13 (26.53%) adverbs are found polymorphic in the study.

### **3.6 Vocabulary Items of their Complexity**

“The term ‘complexity’ is the state of being difficult to understand” (Oxford Advanced Learner Dictionary, 2000:247). The word used in medical science are found complex to understand to the ordinary reader because most of the words used in medical vocabulary are derived from Greek and Latin and their etymological meaning is complex to understand. The words used in medical vocabulary are derived from Greek and Latin and monosyllabic words are least frequent, they are longer in syllabic. So, they are complicated to pronounce by general reader.

Root words are used in less frequent, prefixes, suffixes, and compound words are mostly used so to identify the meaning it is complicated. The researcher has analyzed that even the simple root words are found complex since they are borrowed from Greek and Latin.

## CHAPTER FOUR

### FINDING AND REC RECOMMENDATION

#### 4.1 Findings

On the basis of the study and interpretation, the findings of the present study are summarized below.

1. In case of their origin, the researcher has found that most of the words are derived from Greek and Latin. There were 589 medical terminologies studied by the researcher. Among them, 314 were nouns, 168 verbs, 58 adjectives and 49 adverbs.
2. In terms of parts of speech (i.e word Class) nouns occupy the highest number of frequency and adverbs have the least frequency.
3. Regarding the frequency of occurrence 130 out of 314 nouns are repeated more than 5 items among them, the word '**wound**' is repeated 21 times, similarly the words **composition** and '**pregnant**' repeated 17 times respectively.
4. In case of verbs 64 verbs out of 168 are repeated more than 5 times. Among them the verb '**do**' take authorized used 17 times. Similarly the auxiliary verb '**is**' has the highest frequency among all the words.
5. In case of syllable structures of vocabularies, out of 589 words, 386 words are found in heavy syllable and 203 words are found light syllable.
6. Both monomorphemic and polymorphemic words are found to be used in the textbook.

7. Root words are used in less frequent, prefixes, suffixes and compound words are mostly used. So to identify the meaning, it is complicated for the ordinary reader.
8. The word used in general vocabulary provides the general meaning but the words used in medical field provides the technical meaning so, it is difficult to generalize the word meaning in every field.
9. In case of complexity, the words etymological meaning is different because of their origin. To get the meaning of technological words the medical practitioner is needed.
10. Even the simple root words are found complex since they are borrowed from Latin and Greek.

## **4.2 Recommendations**

On the basis of the findings from the analysis and interpretation of data, the following recommendations have been made.

1. All the vocabulary items found in the textbook are not listed in the word list. The textbook presents a list of only 290 vocabulary items. So, it would be better if all the vocabulary items in the textbook were presented in the word list.
2. The ratio of the frequency of occurrence of vocabulary items should be balanced. The greater disparity is seen in the frequency of occurrence among the vocabulary items. It is difficult here to decide whether the vocabulary items that occur in the textbook are scientifically selected or not. So, vocabulary items should be selected on the basis of the scientific principle.

3. It would be better if the word list presented in the textbook were divided into different parts of speech so that both the teachers and the students could be familiar with the parts of speech and treat the words accordingly.

4. It would be better if the origin of words is mentioned with their etymological meaning in the text or in the glossary.

5. Most of the words are found complex for the ordinary readers. So, it would be better if meaning of the words is mentioned in the text.

### **4.3 Summary**

This research attempts to study the language vocabulary used in medical science in terms of origin, parts of speech, frequency, syllable structure, morphological structure and complexity have been analyzed and interpreted in the present study.

The study is mainly based on descriptive research design. The data for the study were collected to analyze from the textbooks of PCL Nursing, Community Health Nursing and Behavioural Science: Psychiatric Nursing (up to unit three). They were analyzed according to the research objectives. In case of origin, the researcher has found most of the words are derived from Ancient Greek and Greek. Under parts of speech, major word class and their frequency have been dealt here. Structure and complexity are also analyzed in the present research.

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## Appendix I

### Some of the Selected Terminologies with their Origin

Prefix or suffix	Meaning	Origin language and etymology	Example(s)
<b>a-, an-</b>	Denotes an absence of, without	Ancient Greek,	<a href="#">Apathy</a> , <a href="#">Analgia</a>
<b>ab-</b>	Away	Latin	<a href="#">Abduction</a>
<b>abdomin(o)-</b>	Of or relating to the <a href="#">abdomen</a>	Latin,	<a href="#">Abdomen</a>
<b>-ac, -acal</b>	pertaining to	Greek	<a href="#">cardiac</a> , hydrophobic,
<b>acanth(o)-</b>	thorn or spine	Ancient Greek	acanthion, <a href="#">acanthocyte</a> ,
<b>acous(io)-</b>	Of or relating to <a href="#">hearing</a>	Greek	<a href="#">acoumeter</a> , <a href="#">acoustician</a>
<b>acr(o)-</b>	extremity, topmost	Greek	<a href="#">Acrocrahy</a> , <a href="#">acromegal</a> <a href="#">y</a> ,
<b>-acusis</b>	Hearing	Greek	<a href="#">paracusis</a>
<b>-ad</b>	toward, in the direction of		Dorsad
<b>ad-</b>	increase, adherence, motion toward, very	Latin	<a href="#">Adduction</a>
<b>aden(o)-, aden(i)-</b>	Of or relating to a <a href="#">gland</a>	Ancient Greek	<a href="#">Adenocarcinoma</a> ,
<b>adip(o)-</b>	Of or relating to <a href="#">fat</a> or fatty tissue	Latin	<a href="#">Adipocyte</a>
<b>adren(o)-</b>	Of or relating to <a href="#">adrenal glands</a>	Latin	<a href="#">adrenal artery</a>
<b>-aemia (BrE)</b>	<a href="#">blood</a> condition	Greek	<a href="#">Anaemia</a>
<b>aer(o)-</b>	air, gas	Greek	<a href="#">Aerosinusitis</a>
<b>aesthesio- (BrE)</b>	Sensation	Greek	<a href="#">Anesthesia</a>
<b>-al</b>	pertaining to	Latin	<a href="#">abdominal</a>
<b>alb-</b>	Denoting a white or pale color	Latin	<a href="#">Albino</a>
<b>alge(si)-</b>	<a href="#">pain</a>	Greek	<a href="#">Analgic</a>
<b>-algia</b>	Pain	Greek	<a href="#">Myalgia</a>
<b>alg(i)o-</b>	Pain	Greek	<a href="#">Myalgia</a>
<b>allo-</b>	Denoting something as different, or as an addition	Ancient Greek	<a href="#">Alloantigen</a> , <a href="#">allopathy</a>
<b>ambi-</b>	Denoting something as positioned on both sides;	Latin	<a href="#">Ambidextrous</a>

	Describing both of two		
<b>amnio-</b>	Pertaining to the membranous fetal sac (amnion)	Greek	<a href="#">Amniocentesis</a>
<b>amph-,amphi-</b>	on both sides	Greek	<a href="#">Amphicrania,</a>
<b>an-</b>	not, without	Greek	<a href="#">Analgesia</a>
<b>ana-</b>	back, again, up	Greek	<a href="#">Anaplasia</a>
<b>an(o)</b>	<a href="#">anus</a>	Latin	
<b>andr(o)-</b>	pertaining to a <a href="#">man</a>	Greek	<a href="#">Andrology, android</a>
<b>angi(o)-</b>	<a href="#">blood vessel</a>	Greek	<a href="#">Angiogram</a>
<b>aniso-</b>	Describing something as unequal	Ancient Greek	<a href="#">Anisotropic, anisocytosis</a>
<b>ankyl(o)-,ancyl(o)-</b>	Denoting something as crooked or bent	Ancient Greek	<a href="#">Ankylosis</a>
<b>ante-</b>	Describing something as positioned in front of another thing	Latin	<a href="#">antepartum</a>
<b>anti-</b>	Describing something as 'against' or 'opposed to' another	Ancient Greek	<a href="#">Antibody, antipsychotic</a>
<b>apo-</b>	separated from, derived from	Ancient Greek	<a href="#">Apoptosis</a>
<b>arch(i,e,o)</b>	first, primitive		archinephron :
<b>arsen(o)-</b>	Of or pertaining to a male; masculine	Greek	
<b>arteri(o)-</b>	Of or pertaining to an <a href="#">artery</a>	Ancient Greek	<a href="#">Artery, Arteriole</a>
<b>arthr(o)-</b>	Of or pertaining to the joints, limbs	Ancient Greek	<a href="#">Arthritis</a>
<b>articul(o)-</b>	Joint	Latin articulum	<a href="#">Articulation</a>
<b>-ary</b>	pertaining to	Latin <i>-arius</i>	<a href="#">biliary tract</a>
<b>-ase</b>	<a href="#">enzyme</a>	Greek διάστασις, division	<a href="#">Lactase</a>
<b>-asthenia</b>	<a href="#">weakness</a>	Greek, ἀσθένεια	<a href="#">Myasthenia gravis</a>
<b>atel(o)</b>	imperfect or incomplete development		atelocardia :
<b>ather(o)-</b>	fatty deposit, Soft gruel-like deposit		<a href="#">Atherosclerosis</a>
<b>-ation</b>	Process	Latin	<a href="#">Habitation, Lubrication</a>
<b>atri(o)-</b>	an atrium (esp. heart atrium)		Atrioventricular
<b>aur(i)-</b>	Of or pertaining to the ear	Latin	<a href="#">Aural</a>

<b>aut(o)-</b>	Self	Greek	<a href="#">Autoimmune</a>
<b>aux(o)-</b>	increase; growth		auxocardia
<b>axill-</b>	Of or pertaining to the armpit	Latin	<a href="#">Axilla</a>
<b>azo(to)</b>	nitrogenous compound		azothermia

## B

Prefix/suffix	Meaning	Origin language and etymology	Example(s)
<b>balano-</b>	Of the <a href="#">glans penis</a> or <a href="#">glans clitoridis</a>	Greek	<a href="#">Balanitis</a>
<b>bi-</b>	twice, double	Latin	Binary
<b>bio-</b>	Life	Ancient Greek βίος	<a href="#">Biology</a>
<b>blast(o)-</b>	<a href="#">germ</a> or bud	Greek	<a href="#">Blastomere</a>
<b>blephar(o)-</b>	Of or pertaining to the eyelid	Ancient Greek	<a href="#">Blepharoplast</a>
<b>brachi(o)-</b>	Of or relating to the arm	Latin	<a href="#">Brachium of inferior colliculus</a>
<b>brachy-</b>	Indicating 'short' or less commonly 'little'	Ancient Greek	<a href="#">brachycephalic</a>
<b>brady-</b>	'slow'	Ancient Greek	<a href="#">Bradycardia</a>
<b>bronch(i)-</b>	<a href="#">bronchus</a>		<a href="#">Bronchiolitis obliterans</a>
<b>bucc(o)-</b>	Of or pertaining to the cheek	Latin	<a href="#">Buccolabial</a>
<b>burs(o)-</b>	<a href="#">bursa</a> (fluid sac between the bones)	Latin	<a href="#">Bursitis</a>

## C

Prefix or suffix	Meaning	Origin language and etymology	Example(s)
<b>capill-</b>	Of or pertaining to hair	Latin	<a href="#">Capillus</a>
<b>capit-</b>	Pertaining to the head (as a whole)	Latin head	<a href="#">Capitation</a>
<b>carcin(o)-</b>	<a href="#">cancer</a>	Greek	<a href="#">Carcinoma</a>
<b>cardi(o)-</b>	Of or pertaining to the heart	Ancient	<a href="#">Cardiology</a>
<b>carp(o)-</b>	Of or pertaining to the wrist	Latin	<a href="#">Carpopedal</a>
<b>cata-</b>	down, under	Greek	<a href="#">Cataract</a>
<b>-cele</b>	pouching, <a href="#">hernia</a>	Ancient Greek	<a href="#">Hydrocele, Varicocele</a>

<b>-centesis</b>	surgical puncture for <a href="#">aspiration</a>	Ancient Greek	<a href="#">Amniocentesis</a>
<b>cephal(o)-</b>	Of or pertaining to the head (as a whole)	Ancient Greek	<a href="#">Cephalalgia</a>
<b>cerat(o)-</b>	Of or pertaining to the <a href="#">cornu</a> ; a horn	Ancient Greek	<a href="#">Ceratoid</a>
<b>cerebell(o)-</b>	Of or pertaining to the <a href="#">cerebellum</a>	Latin	<a href="#">Cerebellum</a>
<b>cerebr(o)-</b>	Of or pertaining to the brain	Latin	<a href="#">Cerebrology</a>
<b>cervic-</b>	Of or pertaining to the neck, the <a href="#">cervix</a>	Latin	<a href="#">Cervicodorsal</a>
<b>chem(o)-</b>	chemistry, drug	Greek	<a href="#">Chemotherapy</a>
<b>chir(o)-, cheir(o)-</b>	Of or pertaining to the hand	Ancient Greek	<a href="#">Chiropractor</a>
<b>chlor(o)-</b>	Denoting a green color	Ancient Greek	<a href="#">Chlorophyll</a>
<b>chol(e)-</b>	Of or pertaining to bile	Ancient Greek	Cholaemia
<b>cholecyst(o)-</b>	Of or pertaining to the <a href="#">gallbladder</a>	Ancient Greek	<a href="#">Cholecystectomy</a>
<b>chondr(i)o-</b>	cartilage, gristle, granule, granular	Ancient Greek	<a href="#">Chondrocalcinosis</a>
<b>chrom(ato)-</b>	Color	Ancient Greek	<a href="#">Hemochromatosis</a>
<b>-cidal, -cide</b>	killing, destroying	Latin	Bacteriocidal
<b>cili-</b>	Of or pertaining to the <a href="#">cilia</a> , the eyelashes; eyelids	< Latin	<a href="#">Ciliary</a>
<b>circum-</b>	Denoting something as 'around' another	Latin	<a href="#">Circumcision</a>
<b>cis-</b>	on this side	Latin	
<b>clast</b>	Break	Greek	Osteoclast
<b>co-</b>	with, together, in association	Latin	Coenzymes
<b>col-, colo-, colono-</b>	<a href="#">colon</a>		<a href="#">Colonoscopy</a>
<b>colp(o)-</b>	Of or pertaining to the vagina	Ancient Greek	<a href="#">Colposcopy</a>
<b>com-</b>	with, together	Latin	
<b>contra</b>	Against	Latin	<a href="#">Contraindicate</a>
<b>cor-</b>	with, together	Latin	
<b>cor-, core-, coro-</b>	Of or pertaining to eye's pupil	Ancient Greek	<a href="#">Corectomy</a>
<b>cardi-</b>	Of or pertaining to the heart [ <i>Uncommon as a prefix</i> ]	Latin	<a href="#">Commotiocardis</a>
<b>cornu-</b>	Applied to processes and parts of the body describing them likened or similar to horns	Latin horn	

<b>coron(o)-</b>	Crown	Latin	
<b>cost(o)-</b>	Of or pertaining to the ribs	Latin	<a href="#">Costochondral</a>
<b>cox-</b>	Of or relating to the hip, haunch, or hip-joint	Latin	<a href="#">Coxopodite</a>
<b>crani(o)-</b>	Belonging or relating to the <a href="#">cranium</a>	Latin	<a href="#">Craniology</a>
<b>-crine</b>	to secrete	Latin	<a href="#">Endocrine</a>
<b>cry(o)-</b>	Cold	Greek	<a href="#">Cryoablation</a>
<b>cutane-</b>	Skin	Latin	<a href="#">Subcutaneous</a>
<b>cyan(o)-</b>	Denotes a blue color	Ancient Greek	<a href="#">Cyanopsia</a>
<b>cycl-</b>	circle, cycle	Greek	
<b>cyph(o)-</b>	Denotes something as bent ( <i>uncommon as a prefix</i> )	Ancient Greek	<a href="#">Cyphosis</a>
<b>cyst(o)-, cyst(i)-</b>	Of or pertaining to the <a href="#">urinary bladder</a>	Ancient Greek	<a href="#">Cystotomy</a>
<b>cyt(o)-</b>	<a href="#">cell</a>	Greek	<a href="#">Cytokine</a>
<b>-cyte</b>	Cell	Greek	<a href="#">Leukocyte</a>

## D

Prefix/suffix	Meaning	Origin language and etymology	Example(s)
<b>dacryo-</b>	Tear	Greek	
<b>dactyl(o)-</b>	Of or pertaining to a finger, toe	Ancient Greek	<a href="#">Dactylogy</a>
<b>de-</b>	away from, cessation	Latin	
<b>dent-</b>	Of or pertaining to teeth	Latin	<a href="#">Dentist</a>
<b>dermat(o)-, derm(o)-</b>	Of or pertaining to the skin	Ancient Greek	<a href="#">Dermatology</a>
<b>-desis</b>	Binding	Greek	Arthrodesis
<b>dextr(o)-</b>	right, on the right side	Latin	<a href="#">Dextrocardia</a>
<b>di-</b>	Two	Greek	<a href="#">Diplopia</a>
<b>di-</b>	apart, separation	Latin	
<b>dia-</b>	( <i>same as Greek meaning</i> )	Ancient Greek	<a href="#">Diacetyl</a>
<b>dif-</b>	apart, separation	Latin	
<b>digit-</b>	Of or pertaining to the finger [ <i>rare as a root</i> ]	Latin	<a href="#">Digit</a>
<b>-dipsia</b>	suffix meaning "(condition of) thirst"		<a href="#">polydipsia</a>

<b>dis-</b>	separation, taking apart	Latin	<a href="#">Dissection</a>
<b>dors(o)-, dors(i)-</b>	Of or pertaining to the back	Latin	<a href="#">dorsal</a> , <a href="#">Dorsocephalad</a>
<b>duodeno-</b>	duodenum, twelve:	Latin	<a href="#">Duodenal atresia</a>
<b>dynam(o)-</b>	force, energy, power	Greek	
<b>-dynia</b>	Pain		<a href="#">Vulvodynia</a>
<b>dys-</b>	bad, difficult	Greek	<a href="#">Dysphagia</a> ,

## E

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>-eal</b>	pertaining to	Latin	
<b>ec-</b>	out, away	Greek	
<b>ect(o)-</b>	outer, outside	Greek	<a href="#">Ectopic pregnancy</a>
<b>-ectasis, -ectasia</b>	expansion, <a href="#">dilation</a>	Ancient Greek	<a href="#">Bronchiectasis</a> ,
<b>-ectomy</b>	Denotes a surgical operation or removal of a body part. Resection, excision	Ancient Greek	<a href="#">Mastectomy</a>
<b>-emesis</b>	<a href="#">vomiting</a> condition	Greek	<a href="#">Hematemesis</a>
<b>-emia</b>	<a href="#">blood</a> condition (AmE)	Greek	<a href="#">Anemia</a>
<b>encephal(o)-</b>	Of or pertaining to the brain. Also see Cerebro.	Ancient Greek	<a href="#">Encephalogram</a>
<b>endo-</b>	Denotes something as 'inside' or 'within'	Ancient Greek	<a href="#">Endocrinology</a> ,
<b><a href="#">eosin(o)-</a></b>	Red	Greek	<a href="#">Eosinophil granulocyte</a>
<b>enter(o)-</b>	Of or pertaining to the intestine	Ancient Greek	<a href="#">Gastroenterology</a>
<b>epi-</b>	<i>[Same as Greek meaning: on, upon]</i>	Ancient Greek	<a href="#">Epitaxis</a> , <a href="#">epicardium</a> , <a href="#">episclera</a> , <a href="#">epidural</a>
<b>episi(o)-</b>	Of or pertaining to the pubic region, the loins	Ancient Greek	<a href="#">Episiotomy</a>
<b>erythr(o)-</b>	Denotes a red color	Ancient Greek	<a href="#">Erythrocyte</a>
<b>-esophageal, -esophago</b>	gullet (AmE)	Greek	
<b>esthesio-</b>	sensation (AmE)	Greek	
<b>eu-</b>	true, good, well, new	Greek	<a href="#">Eukaryote</a>
<b>ex-</b>	out of, away from	Latin	<a href="#">Exophthalmos</a>



<b>exo-</b>	Denotes something as 'outside' another	Ancient Greek	<a href="#">Exoskeleton</a>
<b>extra-</b>	Outside	Latin	<a href="#">Extradural hematoma</a>

## F

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>faci(o)-</b>	Of or pertaining to the face	Latin	<a href="#">Facioplegic</a>
<b>fibr(o)</b>	Fiber		<a href="#">Fibroblast</a>
<b>filli-</b>	fine, hair like		
<b>-form, -iform</b>	Used to form adjectives indicating 'having the form of'	Latin	<a href="#">Cuneiform</a>
<b>fossa</b>	A hollow or depressed area; trench or channel	Latin	<a href="#">fossa ovalis</a>
<b>front-</b>	Of or pertaining to the forehead	Latin	<a href="#">Frontonasal</a>

## G

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>galact(o)-</b>	Milk	Greek	<a href="#">Galactorrhea</a>
<b>gastr(o)-</b>	Of or pertaining to the stomach	Ancient Greek	<a href="#">Gastric bypass</a>
<b>-gen</b>	(1) Denotes the sense 'born in, from' (2) Denotes the sense 'of a certain kind'	Ancient Greek	(1) <a href="#">Endogen</a> ; (2) <a href="#">Heterogenous</a>
<b>-genic</b>	Formative, pertaining to producing	Greek	<a href="#">Cardiogenic shock</a>
<b>genu-</b>	Of or pertaining to the knee	Latin	<a href="#">Genu valgum</a>
<b>gingiv-</b>	Of or pertaining to the gums	Latin	<a href="#">Gingivitis</a>
<b>glauc(o)-</b>	Denoting a grey or bluish-grey colour	Ancient Greek	<a href="#">Glaucoma</a>
<b>gloss(o)-, glott(o)-</b>	Of or pertaining to the tongue	Ancient Greek	<a href="#">Glossology</a>
<b>gluco-</b>	<a href="#">glucose</a>	Greek	<a href="#">Glucocorticoid</a>
<b>glyco-</b>	<a href="#">sugar</a>		<a href="#">Glycolysis</a>
<b>gnath(o)-</b>	Of or pertaining to the jaw	Ancient Greek	<a href="#">Gnathodynamometer</a>
<b>-gnosis</b>	Knowledge	Greek	<a href="#">diagnosis, progno</a>

			<a href="#">sis</a>
<b>gon(o)-</b>	seed, semen; also, reproductive	Ancient Greek	<a href="#">Gonorrhea</a>
<b>-gram, -gramme</b>	record or picture	Greek	<a href="#">Angiogram</a>
<b>-graph</b>	instrument used to record data or picture	Ancient Greek	<a href="#">Electrocardiograph</a>
<b>-graphy</b>	process of recording		<a href="#">Angiography</a>
<b>gyn(aec)o- (BrE), gyn(ec)o- (AmE)</b>	Woman	Greek	<a href="#">Gynecomastia</a>

## H

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>halluc-</b>	to wander in mind	Classical Latin	<a href="#">Hallucinosi</a>
<b>hemat-, haemato- (haem-, hem-)</b>	Of or pertaining to blood	Latin	<a href="#">Hematology</a> , older form <a href="#">Haematology</a>
<b>hema or hemo-</b>	blood (AmE)	Greek	<a href="#">Hematological malignancy</a>
<b>hemangi or hemangio-</b>	blood vessels		
<b>hemi-</b>	one-half	Ancient Greek	<a href="#">Cerebral hemisphere</a>
<b>hepat- (hepatic-)</b>	Of or pertaining to the liver	Ancient Greek	<a href="#">Hepatology</a>
<b>heter(o)-</b>	Denotes something as 'the other' (of two), as an addition, or different	Ancient Greek	<a href="#">Heterogeneous</a>
<b>hidr(o)-</b>	<a href="#">sweat</a>	Greek	<a href="#">Hyperhidrosis</a>
<b>hist(o)-, histio-</b>	<a href="#">tissue</a>	Greek	<a href="#">Histology</a>
<b>home(o)-</b>	Similar	Ancient Greek	<a href="#">Homeopathy</a>
<b>hom(o)-</b>	Denotes something as 'the same' as another or common	Ancient Greek	<a href="#">Homosexuality</a>
<b>humer(o)-</b>	Of or pertaining to the shoulder (or [rarely] the upper arm)	Incorrect	<a href="#">Humerus</a>
<b>hydr(o)-</b>	Water	Greek	<a href="#">Hydrophobe</a>

<b>hyper-</b>	Denotes something as 'extreme' or 'beyond normal'	Ancient Greek	<a href="#">Hypertension</a>
<b>hyp(o)-</b>	Denotes something as 'below normal'	Ancient Greek	<a href="#">Hypovolemia,</a>
<b>hyster(o)-</b>	Of or pertaining to the womb, the uterus	Ancient Greek I	<a href="#">Hysterectomy</a>

## I

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>-i-asis</b>	Condition	Greek	<a href="#">Mydriasis</a>
<b>iatr(o)-</b>	Of or pertaining to medicine, or a physician [ <i>uncommon as a prefix; common as a suffix, see -iatry</i> ]	Ancient Greek physician	<a href="#">Iatrochemistry</a>
<b>-iatry</b>	Denotes a field in medicine of a certain body component	Ancient Greek	<a href="#">Podiatry,</a> <a href="#">Psychiatry</a>
<b>-ic</b>	pertaining to	Greek -	<a href="#">Hepatic artery</a>
<b>-icle</b>	Small	Latin	<a href="#">Ovarian follicle</a>
<b>-ics</b>	organized knowledge, treatment	Latin	<a href="#">Obstetrics</a>
<b>idio-</b>	self, one's own	Greek	<a href="#">Idiopathic</a>
<b>ileo-</b>	<a href="#">ileum</a>	Greek	<a href="#">Ileocecal valve</a>
<b>infra-</b>	Below	Latin	<a href="#">Infrahyoid muscles</a>
<b>inter-</b>	between, among	Latin	<a href="#">Interarticular ligament</a>
<b>intra-</b>	Within	Latin	<a href="#">Intracranial hemorrhage</a>
<b>ipsi-</b>	Same	Latin	<a href="#">Ipsilateral hemiparesis</a>
<b>irid(o)-</b>	Iris	Greek	<a href="#">Iridectomy</a>
<b>isch-</b>	Restriction	Greek	<a href="#">Ischemia</a>
<b>ischio-</b>	Of or pertaining to the <a href="#">ischium</a> , the hip-joint	Ancient Greek	<a href="#">Ischioanal fossa</a>

## Appendix – 2

### Selected Vocabularies Items Used in Medical science in Terms of Parts of Speech

<b>Word</b>	<b>Meaning</b>	<b>Example sentence</b>
<b>Part of speech</b>		
Abnormal Adj	Not normal for human body	This amount of weight loss is abnormal for women your age.
Ache Noun/verb	Pain that won't go away	I can't sleep because my knees ache in the night.
Acute Adj	Quick to become severe/bad	We knew the baby was coming right away because the women's labor pains were acute.
Allergy noun Allergic adj	A body's abnormal reaction to certain foods or environmental substance (eg causes a rash)	Your son is extremely allergic to peanuts.
Ambulance Noun	Emergency vehicle that rushes people to a hospital	We call the ambulance when josh stopped breathing.
Amnesia Noun	A condition that causes people to lose their memory.	I can't remember the accident because I had amnesia.
Amputation noun Amputate verb	Permanent removal of a limb	We had to amputate his leg because the infection spread so quickly.
Anaemia noun Anaemicadj	Occurs when the body doesn't have enough red blood cells	I have low energy because I amanaemic.
Antibiotics Noun	Medication that kills bacteria and curs infection	My throat infection went away after I started the antibiotics.
Anti-depressant	Medication that helps relieve anxiety and sadness	The anti-depressants helped me get on with life after Lucy died.
Appointment Noun	A schedule meeting with a medical profession	I've made you an appointment with a specialist in three weeks' time.
Arthritis Noun	A disease that cause the joints to become swollen and crippled	My grandmother can't knit anymore because the arthritis in her hands is so bad
Asthma (attack) Noun	A condition that cause a blockage of the airway and make it difficult for a	I carry an inhaler when I run because I have asthma

	person to breathe	
Bacteria Noun	A disease-causing organism	To prevent the spread of bacteria it is important that nurse wash their hands often.
Bedsore Noun	Wounded that develop on a patient' body from lying in one place for too long	If you don't get up and take a walk, you will develop painful bedsore
Benign Adj	Not harmful (not cancerous)	We're hoping that the tests will show that the lump in your breast is benign.
Biopsy Noun	Removal of human tissue in order to conduct certain medical tests	The biopsy ruled out a number of illnesses.
Blood count Noun	The amount of red and white bold cell a person has	You will be happy to know that your blood count is almost back to normal.
Blood donor Noun	A person who gives blood to a blood bank or other person	Blood donors have to answer questions about their medical history.
Blood pressure Noun	The rate of which blood flows through the body (high/ low)	High blood pressure puts you at risk of having a heart attack.
Brace Noun	A device that holds injured body parts in place	You will probably always have to wear a brace on your ankle when you jog.
Breech Adj	Position of an unborn baby in which the feet are down and the head is up	We thought it was going to be a breech birth, but the baby turned himself around.
broken adj	A bone that is divided into two or more pieces as a result of an injury	We thought it was just sprain, but it turned out his leg was broken
Bruise noun Bruised adj	Injured body tissue that is visible underneath the skin	The woman was badly bruised when she came into the emergency room.
Caesarean section, C-section noun	Procedure that involves removing a baby from its mother through an incision in the woman's lower abdomen	The baby was so large that we had to perform a Caesarean section.
Cancer Noun	Disease cause by the uncountable growth of cells	There are many different options when it comes to treating cancer.
Cardiopulmonary resuscitation (CPR) Noun	Restoring a person's breath and circulation	You saved your brother's life by performing CPR
Cast noun	A hard bandage that is wrapped around a broken bone to keep it in place	My leg was in a cast for araduation.

Chapel, chapeline noun	A place where loved ones can go to pray for a patient's recovery:  A priest who visit patient in the hospital	Of you want a place to pray, the chapel is on the third floor.
Chemotherapy Noun	Type of a treatment used on cancer patient	My mother has already had three rounds of chemotherapy.
Chickenpox Noun	A virus commonly contracted by children, characterized by itchy spots all over the body	It is best to get chickenpox as a child so that you don't get it worse as an adult.
Coroner Noun	A person who determines the cause of death after a person dies	We only call the coroner if we think a death is suspicious.
Critical condition Noun	Requiring immediate and constant medical attention	You can't see her right now, she's in critical condition
Crutches Noun	Objects that people with injured leg or feet use to help them walk	T'd rather hop on one foot then use crutches.
Cyst Noun	A sac in the body-tissue filled with fluid (sometimes diseased)	We're going to remove the cysts just to be on the safe side.
Deaf Adj	Unable to her	The accident left the patient both deaf and blind.
Deficiency Noun	A lack of something necessary for one's health	The test shows that you have an iron deficiency.
Dehydrated Adj	In need of water	It is easy for the elderly to become dehydrated in this heat.
Dementia Noun	Loss of mental capacity	It is hard to watch a loved one suffering with dementia.
Diabetes Noun	Type of disease typically involving insulin deficiency	People with diabetes have to constantly check their blood sugar levels.
Diagnosis Noun	Medical explanation of an illness of condition	The doctor would prefer to share the diagnosis with the patient himself.
Discomfort Noun	Experiencing pain	This pain medication should relieve some of your discomfort.
Disease noun	A medical disorder that is harmful to a person's health	I understand that this disease runs in your family.

Dislocated Noun	When a bone is temporarily separated from its joint	You will have to be a sling because of your dislocated shoulder.
Emergency Noun	A medical problem that needs immediate attention	It is important that children know which numb to dial in case of an emergency.
ER (emergency room) Noun	The hospital room used for treating patients with immediate and life-threatening injuries	The child was rush into the ER after he had a severe allergic reaction to a bee mouth.
External adj	On the outside	This cream is for external use only. Do not get it near your ears, eyes, or mouth.
False negative Noun Adj	A test that incorrect ly comes back negative	We had two false negative pregnancy tests, so we didn't know we were having a baby
Family history noun	Medical background of a person's family member	The doctor was concerned about my family history of skin cancer
Fatal Adj	Causing death	The doctor made a fatal error when he wrote the wrong prescription.
Fever noun Feverish adj	Higher than normal body temperature	He is very feverish, and his temperature is near danger point
Flu (influenza) Noun	Many types of respiratory or intestinal infractions passed on through a virus	People who have the flu should not visits hospital patients.
Fracture noun Fractured adj	Broken of cracked bone	Your wrist is fracture and needs a cast.
Germ Noun	A micro- organism, especially one that causes disease	Flower are not allowed in the ward to avoid the risk of germs being brought in.
Genetic Adj	A medical condition of physical feature that is passed on in the family	The disease is part genetic and part environment.
Growth Noun	A ball of tissue that grows bigger than normal, either on or under the skin	That growth on your shoulder is starting to worry me.
Heat attack Noun	Instance in which blood stop pumping through the heart	People who smoke are at greater risk of having a heart attack.
HIV Noun	The virus that infects the human T- cells and leads to AIDS	HIV can be passed down from the mother to her fetus.

Hives Noun	Bumps that appear on the surface of the skin during an allergic reaction	I broke out in hives after I ate that potato casserole.
Illness noun Ill adj	General term for any condition that makes a person feel sick for a certain period o time	Her illness went away when she started eating better.
Immune system Noun	The part of the body that fight diseases, infections, and viruses	You can't have visitors because your immune system is low.
Immunization noun Immunize verb	Am injection that protects against specific disease	Babies are immunized three times in their final year.
Incision Noun	Cut in the body made during surgery	I had to have stitches to close the incision
Inconclusive adj	Unclear	We have to do more x-rays because the first ones were inconclusive.
Infant noun	Young baby	The nurse will demonstrate how to bathe an infant.
infection noun infected adj	Disease around the body (viral or bacterial)	The wound should be covered when you swim prevent it from becoming infected.
Inflamed Adj	Appearance (red and swollen) of an injured body part	My right ankle was minor: just a few cuts and bruises.
Injury Noun	Damage to the body	Her injuries were minor: just a few cuts and bruises.
Intensive care unit (ICU) Noun	Section of the hospital where patients get constant attention and doctors rely on specialization equipment	She will remain in the ICU until she can breathe on her own.
Internal Adj	Under the skin, inside the organs	The doctor will be monitoring her for any internal bleeding.
Itchy Adj	Feeling discomfort on the skin's surface	If you are allergic to this medication your skin will get red and itchy.
IV Noun	A tube that pumps liquids and medication into a patient's body	The toddler was so dehydrated that the doctor decided to get him on an IV.
Lab results Noun	Tests that come back from a laboratory and help doctor make a diagnosis	The lab results have come in and you are free to go home.





Lab (laboratory) noun	Place where samples of blood/ urine etc. are taken for testing	I'll take these samples down to the lab on my way out.
Life support noun	A machine that keeps patients alive by helping them breathe	The woman has severe brain damage and is currently on life support.
Life-threatening Adj	When injuries and conditions are extremely serious	The victim was shot in two places but the bullet wounds are not life- threatening
Light- headed Adj	Feeling of dizziness and being off- balance, caused by lack of oxygen in the brain	If you are feeling light- headed again, lie down and call me.
Malignant Adj	Expected to grow and get much worse (especially related to cancerous cells)	I'm afraid at least one of the tumors is malignant.
Medical school (med school) noun	Place where some trains to be a doctor	After eight year of medical school I can final practice medicine.
New born noun	an infant that is less than three months old	you have to support her neck because she is still a newborn
numb adj	no feeling in a certain body part	the niddle will makde your lower body feel numb

### Appendix III

#### Vocabulary Items in Terms of Parts of Speech

S. N.		Table No. of words	A / GK	Per %	Latin	Per %
1	Nouns	314	194	61.78	120	38.21
2	Verbs	168	98	58.33	70	41.33
3	Adj.	58	39	67.24	19	32.75
4	Adv.	49	28	57.14	21	42.85

#### Frequency of Noun

SN.	Nouns	Singular	Plural	Frequency
1	Microgram	5	6	11
2	Calcium	5		5
3	Instruction	7		7
4	Composition	17		17
5	Lactating	13		13
6	Pregnant	17		17
7	Patient	16		16
8	Neuron- muscular	7		7
9	Baby	3	7	10
10	Adult	3	8	11
11	Severe	6		6
12	Inflection	5		5
13	Absorption	5		5
14	Physician	5	6	11
15	Pharmacy	4	7	11
16	Clinic	5		5
17	Prescription	6		6
18	Sensitivity	8		8
19	ML	5		5
20	Tablet	4	4	8
21	Ulcer	5		5
22	Reaction	6		6
23	Injection	6		6
24	Nicotinic Acid	6		6
25	Folic Acid	5		5
26	Blood Pressure	5		5
27	Uric – Acid	5		5
28	Urinary drug	5	3	8
29	Medicine	5	2	7
30	Price	5		5
31	Practitioner	4	3	7
32	Place	4	3	7
33	Ache	5		5
34	Ambulance	5		5
35	Amnesia	5		5
36	Amputation	5		5
37	Anemia	5		5
38	Anti-depressant	6		6
39	Appointment	5		5

40	Arthritis	5		5
41	Asthma	5		5
42	Bacteria	5		5
43	Bedsore	5		5
44	Biopsy	5		5
45	Blood count	5		5
46	Blood donor	5	2	7
47	Brace	5		5
48	Bruise	5		5
49	Section	5	2	7
50	Cancer	6		6
51	Resuscitation	5		5
52	Cast	5		5
53	Chapel	5		5
54	Chapeline	5		5
55	Chemotherapy	3	1	4
56	Chicken pox	5		5
57	Coroner	6		6
58	Critical condition	6		6
59	Cyst	6		6
60	Deficiency	6	2	8
61	Dementia	6		6
62	Diabetes	5		5
63	Diagnosis	6		6
64	Discomfort	6		6
65	Emergency room	3	3	6
66	Family history	6		6
67	Fever	9		9
68	Flu	7		7
69	Fracture	6	3	9
70	Germ	5	6	11
71	Growth	5		5
72	Heart attack	9		9
73	HIV	9		9
74	Life	3	6	9
75	Illness	5		5
76	Immune – system	5	3	8
77	Incision	6		6
78	Infant	5	3	8
79	Infection	5	6	11
80	Inflection	6		6
81	Injury	7		7
82	ICU	7		7
83	IV	6		6
84	Lab result	6		6
85	Lab	6		6
86	Life support	6		6
87	Medical school	7	2	9
88	New born	8		8
89	OR/ Operating room	5	4	9
90	Operation	4	3	7
91	Pain killer	7		7
92	Pain reliever	7		7

93	Physician			
94	Poison	6		6
95	Privacy	7		7
96	Radiation	9	6	15
97	Residency	7	4	11
98	Resident	5	4	9
99	Routine	5	2	7
100	Scrub	5	4	9
101	Second opinion	5		5
102	Seizure	5	4	9
103	Shock	6	6	12
104	Spasm	5		5
105	Specialist	6	5	11
106	Sprain	6		6
107	Stable	7		7
108	Sting	6		6
109	Stress	6		6
110	Swelling	9		9
111	Symptom	5	7	12
112	Temperature	5	3	8
113	Test – result	6		6
114	Therapy	7		7
115	Transplant	7		7
116	Ultra sound	6	1	7
117	Umbilical	9		9
118	Umbilical cord	9		9
119	Urine sample	7		7
120	Virus	16		16
121	Vein	10		10
122	Visiting hours		6	6
123	Ward	11		11
124	Wheel chair	9	6	15
125	Wound	10	11	21
126	X – Ray	10		10
127	Hard – ness	6		6
128	Softness	7		7
129	Smoothness	7		7
130	Connection	6	2	8

### Frequency of Occurrence of the Verbs

S.N	Verbs	Freq
1	Take	17
2	Do	17
3	Do not	19
4	Authorized	17
5	Sold	16
6	Manufactured	12
7	Keep	13
8	Contains	13
9	Registered	9
10	Vomiting	15
11	Bleeding	15
12	Lactating	16
13	X – Ray	6
14	Sting	6
15	Sprain	6
16	Scrub up	6
17	Prescribe	9
18	Operate on	9
19	Immunize	9

19	Immunize	9
20	Amputate	7
21	Ache	6
22	Established	7
23	Documented	8
24	Development	6
25	Lasting	7
26	Obsolete	7
27	Known	6
28	Opened	1
29	Anatomical work	6
30	Practice	6
31	Observe	7
32	Respect	6
33	Attempts	7
34	Understanding	8
35	Improved	8
36	Pronounced	8
37	Towering	7
38	Considered	7
39	Associated	7

40	Training	7
41	Included	9
42	Interact	7
43	Given	7
44	Describe	8
45	Assumes	7
46	Aspiring	8
47	Performed	8
48	Alludes	6
49	Writing	16
50	Found	16
51	Treatment	15
52	Functioned	11
53	Finding	13
54	Dedicated	11
55	Healing	5
56	Induced	6
57	Received	6
58	Fulfilled	11
59	Provided	11
60	Controlled	9
61	Believed	8
62	Devoted	7
63	Arranged	7
64	Served	6

### Frequency of Adjective

SN.	Adjectives	Freq
1	Abnormal	19
2	Acute	15
3	Anemic	14
4	Benign	14
5	Breech	12
6	Broken	11
7	Deaf	8
8	Dehydrated	7
9	Dislocated	7
10	External	6
11	False Negative	5
12	Fatal	5
13	fractured	5
14	Genetic	4
15	ill	3
16	Inconclusive	3
17	Inflamed	3
18	Internal	3
19	Itchy	2
20	Life threatening	2
21	Light hearted	2
22	Malignant	2
23	Numb	2
24	Paralyzed	2
25	Prenatal	2
26	Private	2
27	Sore	2
28	Stressed	2
29	Swollen	2

30	Tender	2
31	Unconscious	2
32	Wounded	2
33	Yellow	2
34	Absent	1
35	Alphabetical	1
36	Beautiful	1
37	Different	1
38	Double	1
39	Fair	1
40	False	1
41	Final	1
42	God	1
43	Great	1
44	Hard	1
45	Interesting	1

46	Left	1
47	Near	1
48	Rich	1
49	Ripe	1
50	Sad	1
51	Same	1
52	Soft	1
53	Spare	1
54	Suitable	1
55	Sunny	1
56	Sure	1
57	Thin	1
58	Tired	1

### Frequency of Adverbs

S.N	Adverbs	Freq.
1	Where	24
2	When	19
3	There	18
4	Not	17
5	O' clock	14
6	Very	13
7	Yesterday	13

8	Why	12
9	How	8
10	Down	7
11	Orally	7
12	Too	5
13	Well	5
14	Again	4

15	Always	4
16	Away	4
17	Both	4
18	Enough	4
19	Now	3
20	Also	3
21	Fast	3
22	Just	3
23	Last	3
24	Then	2
25	Ago	2
26	Already	2
27	Here	2
28	A lot	2
29	Quickly	2

30	Still	2
31	Tomorrow	1
32	At last	1
33	Back	1
34	Correctly	1
35	Eagerly	1
36	Carly	1
37	Everyday	1
38	Finally	1
39	Happily	1
40	Later	1
41	Nowhere	1
42	One day	1
43	Only	1
44	Probably	1
45	Quite	1
46	Really	1
47	Straight	1
48	Swiftly	1
49	Together	1

### Syllable Structures of Vocabularies

S.N.	Parts of Speech	Heavy	Percent	Light	Percent
1	Noun	205	65.28	109	34.71
2	Verb	113	67.26	55	23.73
3	Adjective	37	63.79	21	36.20
4	Adverb	31	63.26	18	36.73
Total		386		203	

### Morphological Structure of the Vocabulary

S.N	Parts of Speech	Total	Monomorphic	Percent	Polymorphic	Percent
1	Noun	314	231	84.07	83	15.93
2	Verb	168	86	50.84	82	49.6
3	Adjective	58	40	68.96	18	31.03
4	Adverb	49	36	73.47	13	26.53
Total		589	403		196	

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 General Background**

Language is the universal medium for conveying the common facts including complex thoughts, ideas and feeling of everyday life. No language is superior or inferior to other languages in terms of communicative values. The major function of language is to communicate. Chomsky (1957:13) states “Language is a set (finite or infinite) of sentence, each finite in length and constructed out of finite set of element”. A second/foreign language learner has to learn adequate number of vocabulary without a fail. If he is not able to do so, his effort to communicate either in spoken or in written will be meaningless. This means vocabulary plays a key role to convey the message meaningfully. Besides, some language items are easy to learn and some are difficult because of their nature of difficulty.

According to Sapir (1978:8), “Language is a purely human and non-instinctive method of communicating ideas, emotion and desires by means of a system of voluntarily produced symbols.” There is thousand of language in the world. All of them are equally important so far as their communicative function is concerned. However, some language play more dominant role in a particular place. Among them, English is an international as well as widely spoken language in the world.



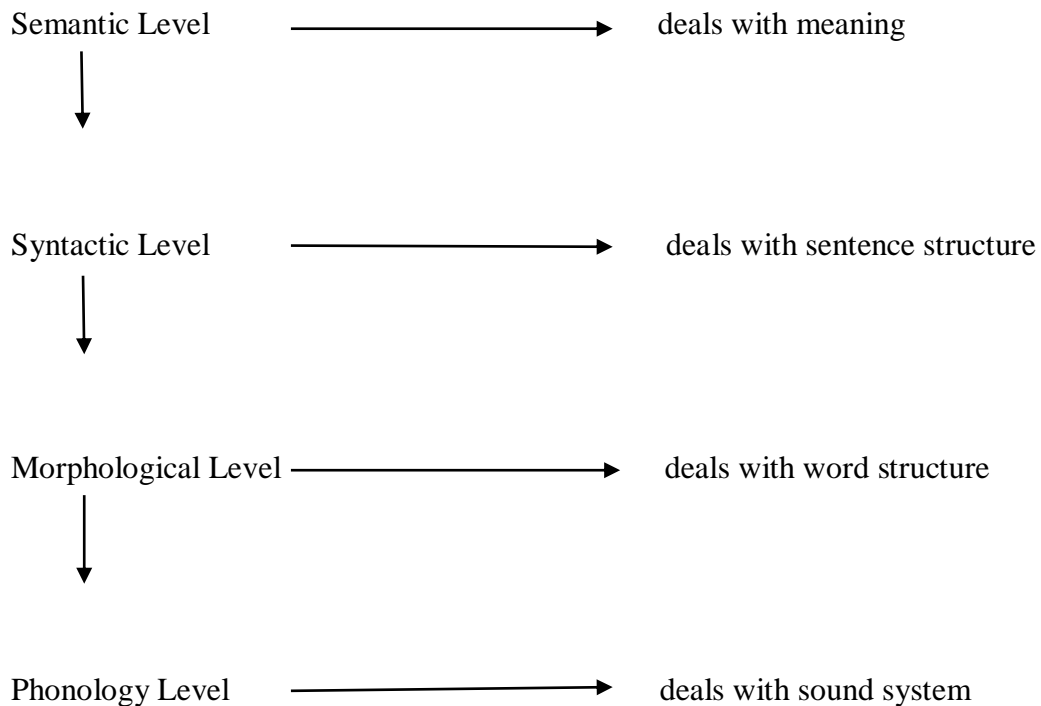
English language is the only key to face challenge on various disciplines of Medical Science, Science, Economics, and Commerce as well. We strongly depend on English for our knowledge in this area. It has earned fame and popularity all over the world. It is the language of mass media, official instruction and education in many countries. To develop one's carrier the knowledge of English is must.

Obviously, learning a second language is not an easy task. It needs a long time and effort to have mastery over all the level of a language. These levels are phonology, lexicon, Grammar and Semantics. Of these all levels, vocabulary (lexicon) is very important because a language learner begins the journey of language learning from this point. Realizing the value of the English language, the Government of Nepal has introduced it as a compulsory subject from the grade One to Bachelor Level in different disciplines. In this connection CDC (2005) states, "There has been an increasing demand for English to start at the beginning of primary education." To meet this demand the Nepal Government decided to introduce English as a subject from grade one starting the academic year 2060 B.S.

### **1.1.1 Level of Language**

The most widely recognized level of languages are phonology, grammar, morphology and semantics, but often phonetics is distinguished from phonology, lexis, semantics, morphology and syntax are seen as separate levels within grammar. Pragmatics is also sometimes described as a level of language.

There are four levels of language (often called linguistic levels). They are shown in the table as follows:



(Katamba, 1993: 4)

The levels are assumed to be ordered in hierarchy, with phonology at the bottom and semantics at the top. The short description of each level is given below:

### **I Phonological Level**

Phonology studies how speech sounds are structured or patterned in a particular language. Besides, it describes contrastive relationship of the phonemes of a language, their distribution, and the articulator features of their allophones.

Each language has its own sound system which is itself complicated in term of their functioning. Phonology deals with the sound system of languages and the functions of

sounds. Phonology, thus, differs from phonetics in that phonetics studies the feature of all human speech sound.

## **II Morphological Level**

Crystal (1996:249) defines, “The branch of linguistics which studies the structure of forms of words.” It deals with the internal structure of words such things as inflection for number, gender, case, tense, aspect, etc; and derivation to form new words. It studies, for example, how the forms take, took, taking and takes differ from one another and how the forms national, unlimited, lively, etc; are derived from the forms nation, limit and live respectively. Similarly, According to Lyons (1968:52), “Morphology deals with the internal structure of words.” This simply means how words are formed in morphology. Thus, it studies the internal structure of words, morphemes, their types, function and formation. Likewise, Katamba (1993:19) defines, “Morphology is the study of word structure.”

## **III Syntactic Level**

“In [linguistics](#), syntax refers to the study of the principles and processes by which [sentences](#) are constructed in particular [languages](#)" (<http://en.wikipedia.org>).

It studies of the rules that govern the ways in which words combine to form phrases, clauses, and sentences in poem. Syntactic is of or relating to or conforming to the rules of syntax; ‘the syntactic rules of a language’ composed in the poem. It deals with the sentence structure. In Syntactic level, we study how words are combined to form larger units of language, viz. phrases, clauses and sentences.

## **IV Semantic Level**

Palmer (1976:1) says “The term ‘semantics’ is the recent addition to the English language”. **Semantics** is the technical term used to refer to study of meaning and deals with the meaning of linguistics forms (as quoted in Guragai, 2006:15). It tells us, for example, that the sense relationship between the words big and large under the headings synonymy. Similarly, it studies big and small under the heading antonym. **It is a systematic study of what meaning is and how it operates.**

### **1.1.2 Defining vocabulary**

Broadly speaking, vocabulary refers to the words that we use in our day to day life for expressing our thoughts and feelings. Regarding the vocabulary Celce-Murcia and Larsen-Freeman (1983:29) say “we take a considerably broader view of the Lexicon, we consider it to comprise not only single words but also words compounds and conventionalized multi words forms.” Similarly, Longman Dictionary of Applied Linguistics (1985:307) defines the term vocabulary as “a set of lexemes including single words compound words and idioms.” A word is the most important unit of language. No one can express their thoughts and feelings if he doesn’t know the words of the languages. Regarding the importance of vocabulary Harmer (1991:153) defines, “if language structures make up the skeleton of language. Then, it is vocabulary that provides the vital organs and the flesh.” For effective communication in the target language, only the knowledge of the structure of that language is not sufficient. It is the vocabulary which is much more important as it provides the vital organs and flesh on the structure of language.

Cambridge International Dictionary of English (1995: 1628) defines vocabulary as “all the words used by a particular person or all the words which exists in a particular language or subject.” The Oxford English Dictionary (1998:721) defines vocabulary as “a collection or list of words with brief explanation of their meanings; now esp. a list of this kind given in an elementary grammar or reading- book of a foreign language.” Similarly, Webster’s New Collage International Dictionary (2000:1600) defines vocabulary as “a list of words and often, phrases, abbreviations, inflectional forms, etc; usually arranged in alphabetical order and defined or otherwise identified, as in the dictionary or glossary.” In Oxford Advanced Learners Dictionary (2000:1447), the term vocabulary has been defined as “all the words known to a person or used in a particular book, subject etc.”

By Definition we can say that vocabulary provides the vital organs and flesh on the skeleton (structure) of language; the teaching of it is of great importance

Vocabulary is such a vital aspects of language in the lack of which it is rather difficult to communicate even if someone has a good knowledge of the system of language in questions. There is sense in which learning a foreign language as basically a matter of learning the vocabulary of that language. So, there is a great need of systematic analysis and evaluation of vocabulary.

### **1.1.3 Word Classes**

Traditional grammarians have classified words into different ‘parts of speech’ and defined each part of speech in notional terms. According to traditional grammar (Nesfield: 1965), there are eight parts of speech: noun, pronoun, adjective, verb,

adverb, preposition, conjunction and interjection. For example, defines these parts of speech are as follows:

- i) "A noun is a word used for naming person or things" (1968:8).
- ii) "A pronoun is a word used instead of a noun or noun equivalent" (1965:34).
- iii) "An adjective is a word used to qualify noun or pronoun" (1965:37).
- iv) "A verb is a word used for saying something about some person or things" (1965:47).
- v) "An adverb is a word used to add something to meaning of a verb, an adjective or another adverb" (1965:31).
- vi) "A preposition is a word used with a noun or a pronoun to show how the person or thing denoted by the noun or pronoun stands in relation to something else" (1965:52).
- vii) "A conjunction is a word used to join words or sentences" (1965:65).
- viii) "An interjection is a word used to express some sudden feeling" (1965:70).

The definitions provided by traditional grammarians are largely notional and extremely vague. It is almost impossible to judge from these definitions whether a particular word is a noun, verb or an adjective.

Likewise, articles (a, an and the) possessives (his, her, their, your, my, our) demonstrative (this, that, these, those) and quantifiers (all, some, neither, etc.) are traditionally included in adjective. But, they are different from most adjective in the sense that firstly they precede adjectives in sentence, secondly most of them are never used predicatively and lastly they have no comparative and superlative forms.

Modern grammarians classify words into 'word classes' by considering their formal structural (i.e. morphological properties) and functional characteristics (i.e. syntactic

properties) (Nesfield: 1965). We should assign words to various classes considering how they are built and what role or roles they play in the structure of phrase separately in brief.

## **V.Noun**

Words are identifiable as nouns on the basis of their syntactic and morphological properties. Adams (1973:17) says, “Among the features that we expect of nouns are: the ability to take the plural and genitive inflection, to take certain characteristic suffixes like –er, -ance, -ness, -ism, to be preceded by determiners, like a, the, this, my, another, to follow prepositions to all as the subject or the object of sentence.

Typical derivational suffixes that form such nouns are:

- age: coverage, percentage, etc.
- ance: appearance, utterance, reluctance etc.
- ation: information, confirmation, reservation etc.
- dom: wisdom, kingdom, boredom etc.
- ee: examinee, employee, payee etc.
- ence: difference, preference, reference etc.
- er: farmer, preacher, teacher etc.
- ess: actress, princess, tigress etc.
- hood: brotherhood, childhood etc.
- ism: idealism, organism, socialism etc.
- ist: socialist, feminist, specialist etc.

-ment: betterment, amendment, statement etc.

## **VI.Pronoun**

A pronoun can occupy the same place as a noun or pronoun phrase in a sentence.

Therefore, the simplest test for the identification of a pronoun is to check if it can replace a noun or a noun phrase. For example: the boy followed the girl = He followed her where 'the boy' changed into 'he' and, 'the girl' changed into 'her'.

Pronoun can be classified into various sub- classes such as,

Personal pronouns                      he, she, it, they etc.

Possessive pronouns                    his, my, our etc.

Demonstrative pronouns              this, that, these etc.

Reflexive pronouns                    myself, ourselves etc.

Interrogative pronouns                what, which, who etc.

Distributive pronouns                all, both, each etc.

Indefinite                                some, any, so etc.

## **VII.Adjective**

Adjectives, in general, can occur within a noun phrase as its constituent. Adams (1973:17) says, "Adjectives are identified by such characters as the ability to assume comparative and superlative forms, to be preceded by adverbs of degree, like very..."

The following are some typical derivational suffixes of adjectives:

-able/-ible:                      reasonable, visible etc.

-al:                                    formal functional etc.

-ic/-ical :                        economical, historical etc.

-ish:                                selfish, greenish etc.

-ive:                                active, effective etc.

-less:                                hopeless. endless etc.



- ous: continuous, courageous etc.
- y: sleepy, dirty etc.

### **VIII. Verb**

The class of verb has a specific function in a sentence. It is the element which is used as the minimal predicate of a sentence, co-occurring with a subject e.g. He came, Birds fly etc. Adams (1973:21) states, “We may say that verbs are typically associated with reference to time, with activity and changing conditions.”

There are three derivational suffixes they are typical to verbs alone, for example.

- en: blacken, soften, lengthen, etc.
- ify: beautify, classify, simplify, etc.
- ise/-ize: realize, organize, analyze, etc.

### **V. Adverb**

An adverb has two major functions: to serve as a constituent in the structure of a sentence, and to serve as a modifier of the head in an adjective phrase or an adverb phrase. As constituents of sentence, adverbs function as adverbials expressing such meaning as the time, place, manner and degree of the verbal action. For example:

He plays football everyday. (Time)

She is waiting for you outside. (Place)

He completed the work successfully. (Manner)

His request was absolutely refused. (Degree)

Many verbs can be identified on the basis of typical derivational suffixes. For example:

- ly: really, completely, truly, etc.
- wards: afterwards, upwards, etc
- wise: clockwise, lengthwise, level wise

## **VI. Preposition**

A preposition is a functional word belonging to a closed class whose form is invariable.

Syntactically, it is always followed by a noun, a pronoun or a noun phrase in English.

For Example:

He came to school yesterday.

My father bought a bicycle for me

## **IX. Conjunction**

Conjunctions like prepositions are closed- class words which are formally invariable and serve a purpose of linking words, phrase and sentence. for example:

Poor but honest.

Bread and butter.

From functional pointing of view there are two types of conjunctions: coordinating and subordinating conjunctions. Conjunctions such as and, but, or, so, are coordinating conjunctions and conjunctions such as because, before, while, although, etc, are the example of subordinating conjunctions.

## **X. Interjection**

Interjections are closed-class items, which are very limited in number, and most of which are monosyllabic, they are used only to express emotions such as joy, pleasure, surprise, pain, etc. for example:

Hey, come and look at this!

Oh, how horrible!

Wow, that car certainly goes fast!

## 1.2 Literature Review

In the department of English education, some studies have been carried out on the analyses of textbook and some on vocabulary achievement. Some of the studies which are more or less related to this study can be observed as follows:

**Chundal (1997)** has, in his M.Ed. thesis, studies on “English vocabulary achievements of the student of Grade Six”. And, findings of the study are stated descriptively. His study has shown that the students’ English vocabulary achievement was poor in total. The boys’ vocabulary achievement was better than that of the girls’. Similarly, the students from urban areas were better than students from rural areas.

**Khatri (2000)** has carried out a study on “English vocabulary (noun and verbs) achievement of the student of grade Eight”. The percentage of the total achievement of the students in nouns and verbs were 67.9% and 59% respectively.

**Tiwari (2001)** has studied, “The achievement of English vocabulary by the students of Grade 10”. His study has shown that 43% of vocabulary items were quite difficult for the level of grade. And 52% of the total of the students were below the average.

**Dahal (2002)** has analyzed, “The new English textbook for Grade ten in terms of physical aspects, organization of the materials and its presentation”. His study was positive towards the organization and presentation of the materials but it was negative on the physical aspects to the book.

**Tiwari (2004)** has studied, “The vocabulary used in English textbook for the Grade four”. His study has shown that 546 different vocabulary items have been used in the

textbook. The auxiliary verb is has the highest number of frequency and both definite and indefinite articles were found to be used in the textbook.

**Dawadi (2004)** has analyzed, “The new English textbook for Grade seven”. Her objective of the study was to examine the qualities of Grade seven English textbook in the physical and academic aspects her study shown that the subject matter was free from sex-basis. It was interesting for the students to read and it provided new information. It did not contain all contents expected by curriculum.

**Bohora (2004)** carried out a research on “A Descriptive study on the English textbook for grade one”. He found that 217 vocabulary items were found in textbook presented a list of only 183 vocabularies. The vowel sound /d/ and consonant sound /z/ were not found in the language used in the textbook.

### **1.3 Objectives of the Study**

The objectives of the study are as follows:

- i) To study the vocabulary items used in the medical science in terms of: origin, parts of speech, frequency, syllable structure, morphological structure and complexity
- ii) To enlist some pedagogical implications.

### **1.4 Significance of the Study**

Vocabulary works as the building blocks of language learning. It includes the use of single words, compound words, idioms and the meaning in oral or written discourse.

So, the researcher hopes that this study will be significant in the following ways:

- i) This research will provide valuable insights to the people who are interested in analyzing vocabulary items.

- ii) It will be beneficial to syllabus designers and textbook writers.
- iii) It will be helpful in determining whether or not the vocabulary are suitable for the very grade.
- iv) This study will be fruitful to school teachers, especially to the medical practioners.
- v) This will be useful to the teacher trainers and students too.
- vi) This study will also act as a guide for further study on vocabulary analysis.

### **1.5 Definition of Specific Terms**

**Abbreviated forms:** Abbreviated forms refer to a short form of words e.g. T.V.

**Affix:** A letter a sound, or group of letter or sounds, which is added to a word, and which changes the meaning or function of the word.

**Complex words:** Polymorphemic words with at least two bases, which are both words, or at any rate, root morphemes.

**Constant cluster:** The sequence of two or more constant phonemes at the beginning or final of syllable.

**Constituent:** A basic term, in grammatical analysis for a linguistic unit, which is a functional component of a larger construction.

**Contracted forms:** The items, which have become shorter due to the deletion of some letters.

**Conventionalized multiword forms:** Group of words that occur and serve specific functions.

**Derivation:** The formation of new words by adding affixes to other words or morphemes.

**Frequency:** The reoccurrence of words.

**Lexemes:** Lexemes are the vocabulary items that are listed in the dictionary.

**Monomorphemic words:** Words with only one morpheme (free morpheme)

**Monosyllabic words:** A word containing a single syllable is called monosyllabic word

**Morpheme:** A minimal unit of grammatical description in the sense that it cannot be segmented can't further at the grammatical level of analysis.

**Parts of speech:** A term used to describe the different types of words that are used to forms of sentences, such as noun, verb, adjective, adverb, preposition, conjunction, interjection, etc

**Polymorphemic words:** Words with more than one morpheme.

**Polysyllabic word:** A word containing more than one syllable is called polysyllabic word

**Root:** It is the base form of a word, which can't be further analyzed without total loss of identity.

**Suffix:** An affix attached after a root or stem or base such as -ly as in quietly

**Syllable:** A unit of pronunciation typically larger than a single sound and smaller than a word.

**Words form:** Physical realizations or representations of lexemes.

## 1.6 Medical Terminologies

Medical terminology is a language for accurately describing the human body and associated components, conditions, process in a science based manner. Some examples are; R.I.C.E. trapezium and lentissimo dorsa. It is to be used in the medical and nursing fields. Their systematic approach to word building and term comprehension is based on the concept of; (a) word roots, (b) prefixes, and (c) suffixes. The word is a term derived from a sources language such Greek and Latin and usually describes a body part. The prefix can be added in front of term to modify the word root by giving additional information about the location of an organ, the number of parts, of time involved. Suffixes are attached to the end of a word root to add meaning such as condition such as condition, disease process, or procedure.

In the process of certain medical terminology, certain rules of language apply. These rules are a part of language mechanics called linguistics. So, when a term is developed, some medical process is applied. The word root is developed to include a vowel sound following the term to add a smoothing action to the sound of the word a word when applying a suffix. The result is the formation of a new term with a vowel attached {word root +vowel} called a combing form. In English, the most common vowel in the formation of the common vowel used in the formation of the combing form is the letter –o-, added to the word root.

Prefixes do not normally require further modification to be added to a word root because the prefix normally ends in a vowel or vowel sound, although in some cases they may assimilate slightly and an in- may change into im- or, sym-. Suffixes are

categorized as either (a) needing the combining form, or (b) not needing the combining form since they start with vowel.

Decoding the medical term is an important process, once experience is gained in the process of forming and decoding medical terminology, the process begins to make sense and becomes easier. One approach involves breaking down the word by evaluating the meaning of the first, then prefix, and finally the word root. This will generally produce a good result for the experience health care professional. When in doubt, the result should be verified by a medical dictionary. The process of learning a new language, such as medical terminology, is a challenging, yet attainable goal as the basic rules –once learned-make the process easier.

One quick online reference is a dictionary search engine. The allows one to enter a medical term into a dialogue box and initiate a search. There are also numerous online medical dictionaries to select from. Once a term is located, the response will be subdivided into several basic formats, including general usage, medicine, Law, Business, and others.

The use of medical dictionary or internet search engine is most helpful in learning the exact meaning of medical term. However, if the basic concepts of word building are understood, many words are understandable to the student of medical terminology.

In forming or understanding a word root, one needs a basic comprehension of the term and the source language. The study of the origin of words is called etymology. For example, if a word was to be formed to indicate a condition of kidneys, there are two primary roots –one from Greek (nephr) Renal failure would be a condition of kidneys, and nephritis is also a condition, of the kidney. To continue using these



terms, other combination will be presented for the purpose of examples; the term ‘supra –renal is a combination of the prefix supra –“nephrologists” combines the root word for kidney to the suffix – ologist with the resultant meaning of “one who studies the kidneys.”

In medical terminology, the word root is not usually capable of standing alone as a complete word within a sentence. This is different than most words root in modern English. The medical word root is taken from a different source language, so it will remain meaningless as a stand –alone term in a sentence. A suffix or prefix must be added to make a usable medical term. For example the term for “cornering the heart “is ‘cardiacus’ from the Greek cardiac. If a person is suffering from a heart related illness, the statement, ‘the patient suffered acaridae event’ would not make sense. However, with the addition of a suffix –ac, the statement would be modified to read, ‘The patient suffered a cardiac event’ are capable of standing alone in a sentence.

An additional challenge to the student of medical terminology is that formation of the plural of a word must be done using the rules of forming the proper plural form as used in the source language. This is more difficult than in English, where adding –s or –es is the rule. Greek and Latin each have differing rules to be applied when forming the plural form of the word root. Often such detail can be found using a medical dictionary.

There is also another rule of medical terminology to be recognized by the student.

When more than one body parts is used in the formation of a medical term, the individual word root are joined together by using the combining form using the letter – o- to indicate the joining together of various body parts. For example if there is an inflammation of the stomach and intestine, this would be written as gastro –and enter

–plus –it s, gastroenteritis. In this example, the-o- signifies the joining together of two body parts.

Medical terminology often uses words created using prefixes and suffixes in Latin Ancient Greek. In medicine, their meanings, and their etymology, are informed by the language of origin. Prefixes and suffixes, primarily in Greek –but also in Latin, have droppable - o - medical roots generally go together according language: Greek prefixes go with Greek suffixes and Latin prefixes with Latin suffixes. Although it is technically considered acceptable to create hybrid words, it is strongly preferred not to mix different lingual roots. Examples of well-accepted medical words that do mix lingual roots are neonatology and quadriplegia.

## **CHAPTER TWO**

### **METHODOLOGY**

The researcher adopted the following methodology to accomplish the present study.

#### **2.1 Source of Data**

To accomplish the present study, the researcher used only the secondary source of data.

#### **2.2 The Population of the Study**

The population of the study consists of different issues from the two different books of **PCL Nursing, Community Health Nursing** and **Behavioral Science, Psychiatric Nursing**, up to unit three only. Altogether 589 different medical terminologies are the population of the study.

#### **2.5 Sampling Procedure**

The researcher has collected the data applying stratifying sampling procedure. The vocabularies from the two different textbooks **up to unit three** of PCL Nursing have been concluded. Altogether 589 terminologies have been dealt here.

## **2.6 Tools for Data Collection**

The main tool for this research study was observation. The researcher judged only the medical terminologies in terms of major word class only to get the required information.

## **2.5 Process of Data Collection**

The researcher followed the given stepwise processes of data collection while carrying out the research.

- ix. The researcher listed all the vocabulary items used in the textbook of PCL Nursing, entitled **Community Health Nursing and Behavioral Nursing, Psychiatric Nursing**. Except the vocabulary items used in tips to the teacher.
- x. The preliminary study related to the topic was done by consulting different books, websites, researches, etc.
- xi. The observation was done based on medical terminologies found in the texts of **Community Health Nursing and Behavioral Nursing, Psychiatric Nursing** (up to unit three only).
- xii. The medical terminologies was analyzed and interpreted based on the major word class (*Noun, Verb, Adjective and adverb*).
- xiii. The researcher counted the frequency of occurrence of each and every vocabulary items of the major word class by the use of stratifying sampling procedure.

- xiv. The researcher has analyzed the morphological structure of medical terminologies in terms of monomorphic and polymorphic.
- xv. The researcher analyzed the syllable structure and complexity of medical terminologies in terms of heavy and light syllable and their origin respectively.
- xvi. The collected items were tabulated and analyzed and interpreted descriptively using simple statistical tools like percentage.

## **2.6 Limitation of the Study**

The study was limited in the following ways:

- v. The study was basically limited to the vocabulary items used in the textbook for PCL nursing, 'Community Health Nursing and Behavioral Nursing, Psychiatric Nursing' up to unit three only.
- vi. The study was limited to the vocabulary items in terms of origin, the parts of speech, frequency of occurrence, syllable structure and morphological structure and complexity.
- vii. The study was limited only in the major word class (Noun, Verb Adjective and Adverb).
- viii. The study was limited to study only the medical terminologies which are found 589 in number in two different books.

## **CHAPTER THREE**

### **ANALYSIS AND INTERPRETATION**

The research is an attempt to study vocabulary items used in medical science. So, under this heading the researcher has analyzed the vocabulary items (major word class only) in terms of their origin, parts of speech, frequency of occurrence, syllable structures, morphological structures and complexity.

#### **3.1 The Vocabulary Items in Terms of their Origin**

While analyzing the data, the researcher has found the medical terminologies derived from Greek and Latin which are shown in the table as follows:

**Table 1**

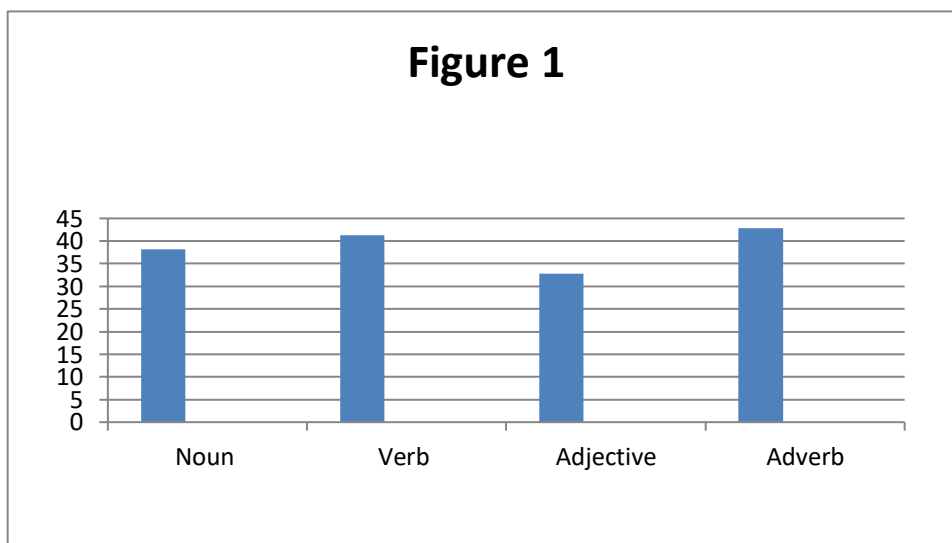
#### **Origin of Vocabularies**

<b>Parts of</b>	<b>Total no. of words</b>	<b>A / GK</b>	<b>Per %</b>	<b>Latin</b>	<b>Per %</b>
-----------------	---------------------------	---------------	--------------	--------------	--------------

Speech						
1	Nouns	314	194	61.78	120	38.21
2	Verbs	168	98	58.33	70	41.33
3	Adj.	58	39	67.24	19	32.75
4	Adv.	49	28	57.14	21	42.85
Total		589	359		230	

**Figure 1**

**Origin of Vocabulary**



The above table shows that there are 589 vocabularies. Of them 314 vocabulary items are nouns. Most of the words are derived from Ancient Greek and Greek. It covers the 61.78 percentage. It means, 194 out of 314 nouns come from ancient Greek and Greek. Similarly, 120 verbs or 38.21 percent verbs are derived from Latin and 58.33

percent verbs out of 168 are derived from Greek and 41.66 percent from Latin. In case

<b>SN.</b>	<b>Parts of speech</b>	<b>No of words</b>	<b>Percentage</b>
1	Nouns	314	45.31
2	Verbs	168	24.24
3	Adjectives	58	8.36
4	Adverbs	49	7.07

of adjectives, 39 adjectives out of 58, 67.24% are derived from Greek and 19 out of 58 adjectives are derived from Latin. Similarly, 28 out of 49 adverbs are from Greek and 21 out of 49 are from Latin (See Appendix – 1).

### **3.2 The Vocabulary Items in Terms of the Parts Of Speech**

There were 589 different words found to be used belonging to different parts of speech. The numbers of vocabulary items belonging to different parts of speech are presented in the following table:

**Table 2**  
**Vocabulary Items in Terms of Parts of Speech**

The above table shows that there are 314 nouns used in the texts which have covered 45.31%. Similarly out of 693, there are 168 (14.24%) verbs, 58 (8.36%) adjectives, 49 (7.07%) adverbs.

### **3.3. The Vocabulary Items in terms of the Frequency of Occurrence**

The data was analyzed in terms of frequency of occurrence under the following sub-heading:

#### **3.3.1 Frequency of the occurrence of noun**



While counting the frequency of occurrence of nouns, altogether 314 vocabulary items belonging to nouns were found to be used in the text. Among them the nouns which are repeated more than 5 times are mentioned with their frequency of occurrence in the following table.

**Table 3**  
**Frequency of Noun**

SN.	Nouns	Singular	Plural	Frequency
1	Microgram	5	6	11
2	Calcium	5		5
3	Instruction	7		7
4	Composition	17		17
5	Lactating	13		13
6	Pregnant	17		17
7	Patient	16		16
8	Neuron- muscular	7		7
9	Baby	3	7	10
10	Adult	3	8	11
11	Severe	6		6
12	Inflection	5		5
13	Absorption	5		5
14	Physician	5	6	11
15	Pharmacy	4	7	11
16	Clinic	5		5
17	Prescription	6		6
18	Sensitivity	8		8
19	ML	5		5
20	Tablet	4	4	8
21	Ulcer	5		5
22	Reaction	6		6
23	Injection	6		6
24	Nicotinic Acid	6		6

25	Folic Acid	5		5
26	Blood Pressure	5		5
27	Uric – Acid	5		5
28	Urinary drug	5	3	8
29	Medicine	5	2	7
30	Price	5		5
31	Practitioner	4	3	7
32	Place	4	3	7
33	Ache	5		5
34	Ambulance	5		5
35	Amnesia	5		5
36	Amputation	5		5
37	Anemia	5		5
38	Anti-depressant	6		6
39	Appointment	5		5
40	Arthritis	5		5
41	Asthma	5		5
42	Bacteria	5		5
43	Bedsore	5		5
44	Biopsy	5		5
45	Blood count	5		5
46	Blood donor	5	2	7
47	Brace	5		5
48	Bruise	5		5
49	Section	5	2	7
50	Cancer	6		6
51	Resuscitation	5		5
52	Cast	5		5
53	Chapel	5		5
54	Chaplin	5		5
55	Chemotherapy	3	1	4
56	Chicken pox	5		5

57	Coroner	6		6
58	Critical condition	6		6
59	Cyst	6		6
60	Deficiency	6	2	8
61	Dementia	6		6
62	Diabetes	5		5
63	Diagnosis	6		6
64	Discomfort	6		6
65	Emergency room	3	3	6
66	Family history	6		6
67	Fever	9		9
68	Flu	7		7
69	Fracture	6	3	9
70	Germ	5	6	11
71	Growth	5		5
72	Heart attack	9		9
73	HIV	9		9
74	Life	3	6	9
75	Illness	5		5
76	Immune – system	5	3	8
77	Incision	6		6
78	Infant	5	3	8
79	Infection	5	6	11
80	Inflection	6		6
81	Injury	7		7
82	ICU	7		7
83	IV	6		6
84	Lab result	6		6
85	Lab	6		6
86	Life support	6		6
87	Medical school	7	2	9
88	New born	8		8

89	OR/ Operating room	5	4	9
90	Operation	4	3	7
91	Pain killer	7		7
92	Pain reliever	7		7
93	Physician			
94	Poison	6		6
95	Privacy	7		7
96	Radiation	9	6	15
97	Residency	7	4	11
98	Resident	5	4	9
99	Routine	5	2	7
100	Scrub	5	4	9
101	Second opinion	5		5
102	Seizure	5	4	9
103	Shock	6	6	12
104	Spasm	5		5
105	Specialist	6	5	11
106	Sprain	6		6
107	Stable	7		7
108	Sting	6		6
109	Stress	6		6
110	Swelling	9		9
111	Symptom	5	7	12
112	Temperature	5	3	8
113	Test – result	6		6
114	Therapy	7		7
115	Transplant	7		7
116	Ultra sound	6	1	7
117	Umbilical	9		9
118	Umbilical cord	9		9
119	Urine sample	7		7
120	Virus	16		16

121	Vein	10		10
122	Visiting hours		6	6
123	Ward	11		11
124	Wheel chair	9	6	15
125	Wound	10	11	21
126	X – Ray	10		10
127	Hardness	6		6
128	Softness	7		7
129	Smoothness	7		7
130	Connection	6	2	8

The above table shows that 130 out of 314 nouns are repeated more than 5 times. Less than 5 times repeated words are not mentioned in the table. Only the medical terminologies are focused and presented. Out of 130 words, the word ‘**wound**’ is repeated 21 times, ‘**composition**’ and ‘**pregnant**’ are repeated 17 times respectively and like, ‘**patient, viruses**’ are repeated 16 times and so on.

### 3.3.2 Frequency of Occurrence of the Verbs

Altogether 168 vocabulary items related to verbs used in the medical science. Verbs with their frequency of occurrence are presented in the following table. The verbs which are repeated more than 6 times are only mentioned in the research.

**Table No 4**

19	Immunize	9
20	Amputate	7
21	Ache	6
22	Established	7
23	Documented	8
24	Development	6
25	Lasting	7

### Frequency of Occurrence of the Verbs

S.N	Verbs	Freq
1	Take	17
2	Do	17
3	Do not	19
4	Authorized	17
5	Sold	16
6	Manufactured	12
7	Keep	13
8	Contains	13
9	Registered	9
10	Vomiting	15
11	Bleeding	15
12	Lactating	16
13	X – Ray	6
14	Sting	6
15	Sprain	6
16	Scrub up	6
17	Prescribe	9
18	Operate on	9
19	Immunize	9

26	Obsolete	7
27	Known	6
28	Opened	11
29	Anatomical work	6
30	Practice	6
31	Observe	7
32	Respect	6
33	Attempts	7
34	Understanding	8
35	Improved	8
36	Pronounced	8
37	Towering	7
38	Considered	7
39	Associated	7

40	Training	7
41	Included	9
42	Interact	7
43	Given	7
44	Describe	8
45	Assumes	7
46	Aspiring	8
47	Performed	8
48	Alludes	6
49	Writing	16
50	Found	16
51	Treatment	15
52	Functioned	11

53	Finding	13
54	Dedicated	11
55	Healing	5
56	Induced	6
57	Received	6
58	Fulfilled	11
59	Provided	11
60	Controlled	9
61	Believed	8
62	Devoted	7
63	Arranged	7
64	Served	6

The above table displays that only the main verbs frequency is calculated which are repeated more than 5 times, the word, ‘do **not**’ has the highest frequency. It has occurred 19 times. The words ‘**do**’ take authorized used 17 times. The word ‘**lactating**’ and ‘**sold**’ have the 16 times frequency. Similarly the verbs like **bleeding vomiting, treatment** have the 15 times frequency. The Auxiliary verbs are not mentioned in the table but they have the highest number of frequency among all verbs. Especially ‘**is**’ is more frequently used than other auxiliaries.

### 3.3.3 Frequency of Occurrence of the Adjectives

There were 58 vocabulary items belonging to adjectives found to be used in the text book. Adjectives found in the text are presented in the following table with their frequency:

**Table5**  
**Frequency of Adjective**

SN.	Adjectives	Freq
1	Abnormal	19
2	Acute	15
3	Anemic	14
4	Benign	14
5	Breech	12
6	Broken	11
7	Deaf	8
8	Dehydrated	7
9	Dislocated	7
10	External	6
11	False Negative	5
12	Fatal	5
13	fractured	5
14	Genetic	4
15	ill	3
16	Inconclusive	3
17	Inflamed	3
18	Internal	3
19	Itchy	2
20	Life threatening	2
21	Light hearted	2
22	Malignant	2
23	Numb	2
24	Paralyzed	2
25	Prenatal	2
26	Private	2
27	Sore	2
28	Stressed	2
29	Swollen	2

30	Tender	2
31	Unconscious	2
32	Wounded	2
33	Yellow	2
34	Absent	1
35	Alphabetical	1
36	Beautiful	1
37	Different	1
38	Double	1
39	Fair	1
40	False	1
41	Final	1
42	God	1
43	Great	1
44	Hard	1
45	Interesting	1
46	Left	1
47	Near	1
48	Rich	1
49	Ripe	1
50	Sad	1
51	Same	1
52	Soft	1
53	Spare	1
54	Suitable	1
55	Sunny	1
56	Sure	1
57	Thin	1
58	Tired	1



The above table indicates that the adjective ‘**abnormal**’ has the highest number of frequency. It has occurred 19 items in the textbook. Out of 58 adjectives, 25 (43.10%) different adjectives have occurred only 1 item in the textbook. Among three degrees of comparison of adjectives (i.e. positive, comparative and superlative degree) only positive degree of adjective was found to be used in the textbook. This fact shows that the different adjectives have been emphasized in each Grade. The great disparity is found in the total number of adjectives.

### 3.3.4 Frequency of Occurrence of the Adverbs

There were 49 vocabulary items belong to adverbs found to be used in the textbook. Adverb found in the textbook are tabulated with their frequency of occurrence in the following way.

**Table 6**  
**Frequency of Adverbs**

S.N	Adverbs	Freq.
1	Where	24
2	When	19
3	There	18
4	Not	17
5	O’ clock	14
6	Very	13
7	Yesterday	13
8	Why	12
9	How	8
10	Down	7
11	Orally	7
12	Too	5
13	Well	5
14	Again	4

15	Always	4
16	Away	4
17	Both	4
18	Enough	4
19	Now	3
20	Also	3
21	Fast	3
22	Just	3
23	Last	3
24	Then	2
25	Ago	2
26	Already	2
27	Here	2
28	A lot	2
29	Quickly	2

30	Still	2
31	Tomorrow	1
32	At last	1
33	Back	1
34	Correctly	1
35	Eagerly	1
36	Carly	1
37	Everyday	1
38	Finally	1
39	Happily	1
40	Later	1

41	Nowhere	1
42	One day	1
43	Only	1
44	Probably	1
45	Quite	1
46	Really	1
47	Straight	1
48	Swiftly	1
49	Together	1

The above table shows that the adverbs **where** has the highest number of frequency. It has occurred 24 times in the textbook. Out of 49 adverbs, 18 (36%) adverbs have occurred only one time in the textbook. Some words such as **yesterday** and **tomorrow** have been used both as a noun and an adverb in the textbook. As an adverb, the frequency of **yesterday** and **tomorrow** is 13 and 1 time respectively.

### 3.4 Syllable Structure of the Vocabulary

According to Abercrombie (1967), "Syllable is the unit of pronunciation which can also be classified according to syllable weight." The researcher has studied the terminologies in case of syllable structure in terms of their weight: light and heavy syllable and shown in the following table.

**Table 7**

**Syllable Structures of Vocabularies**

<b>S.N.</b>	<b>Parts of Speech</b>	<b>Heavy</b>	<b>Percent</b>	<b>Light</b>	<b>Percent</b>
1	Noun	205	65.28	109	34.71
2	Verb	113	67.26	55	23.73
3	Adjective	37	63.79	21	36.20
4	Adverb	31	63.26	18	36.73
Total		386		203	

The above table shows that out of 314 nouns, 205 (65.28%) are found in heavy syllable and 109 (34.71%) nouns are found in light syllable. Similarly, out of 168 verbs 113 (67.26%) are found in heavy syllable and 55 (32.73%) are found in light syllable. In case of adjectives, out of 58, 37 (63.79%) adjectives are heavy and 21(36.20%) are found in light syllable. Out of 49 adverbs 31 (63.26%) are heavy and 18 (36.73%) are found to be light syllable.

**3.5 Morphological Structure of the Vocabulary**

While analyzing the morphological structure of the vocabulary, the researcher has found the following result in terms of mono morphemic and polymorphic sub-headings.

**Table 8**

**Morphological Structure of the Vocabulary**

<b>S.N</b>	<b>Parts of Speech</b>	<b>Total</b>	<b>Monomorphic</b>	<b>Percent</b>	<b>Polymorphic</b>	<b>Percent</b>
1	Noun	314	231	84.07	83	15.93
2	Verb	168	86	50.84	82	49.6

3	Adjective	58	40	68.96	18	31.03
4	Adverb	49	36	73.47	13	26.53
Total		589	403		196	

The above table shows that out of 314 nouns 231(84.07%) nouns are monomorphemic and 83 (15.93%) nouns are polymorphemic. Similarly, out of 168 verbs 86 (50.84%) are monomorphemic and 82 (49.6%) are polymorphemic. In case of adjective, out of 58 adjectives 40 (68.96%) are found monomorphemic and 18 (31.03%) are polymorphemic. Out of 49 adverbs 36 (73.47%) are monomorphemic and 13 (26.53%) adverbs are found polymorphemic in the study.

### **3.6 Vocabulary Items of their Complexity**

“The term ‘complexity’ is the state of being difficult to understand” (Oxford Advanced Learner Dictionary, 2000:247). The words used in medical science are found complex to understand to the ordinary reader because most of the words used in medical vocabulary are derived from Greek and Latin and their etymological meaning is complex to understand. The words used in medical vocabulary are derived from Greek and Latin and monosyllabic words are least frequent, they are longer in syllabic. So, they are complicated to pronounce by general reader.

Root words are used in less frequent, prefixes, suffixes, and compound words are mostly used so to identify the meaning it is complicated. The researcher has analyzed that even the simple root words are found complex since they are borrowed from Greek and Latin.

## CHAPTER FOUR

### FINDING AND REC RECOMMENDATION

#### 4.1 Findings

On the basis of the study and interpretation, the findings of the present study are summarized below.

1. In case of their origin, the researcher has found that most of the words are derived from Greek and Latin. There were 589 medical terminologies studied by the researcher. Among them, 314 were nouns, 168 verbs, 58 adjectives and 49 adverbs.
2. In terms of parts of speech (i.e word Class) nouns occupy the highest number of frequency and adverbs have the least frequency.
3. Regarding the frequency of occurrence 130 out of 314 nouns are repeated more than 5 items among them, the word '**wound**' is repeated 21 times, similarly the words **composition** and '**pregnant**' repeated 17 times respectively.
4. In case of verbs 64 verbs out of 168 are repeated more than 5 times. Among them the verb '**do**' take authorized used 17 times. Similarly the auxiliary verb '**is**' has the highest frequency among all the words.
5. In case of syllable structures of vocabularies, out of 589 words, 386 words are found in heavy syllable and 203 words are found light syllable.
6. Both monomorphemic and polymorphemic words are found to be used in the textbook.

7. Root words are used in less frequent, prefixes, suffixes and compound words are mostly used. So to identify the meaning, it is complicated for the ordinary reader.
8. The word used in general vocabulary provides the general meaning but the words used in medical field provides the technical meaning so, it is difficult to generalize the word meaning in every field.
9. In case of complexity, the words etymological meaning is different because of their origin. To get the meaning of technological words the medical practitioner is needed.
10. Even the simple root words are found complex since they are borrowed from Latin and Greek.

## **4.2 Recommendations**

On the basis of the findings from the analysis and interpretation of data, the following recommendations have been made.

1. All the vocabulary items found in the textbook are not listed in the word list. The textbook presents a list of only 290 vocabulary items. So, it would be better if all the vocabulary items in the textbook were presented in the word list.
2. The ratio of the frequency of occurrence of vocabulary items should be balanced. The greater disparity is seen in the frequency of occurrence among the vocabulary items. It is difficult here to decide whether the vocabulary items that occur in the textbook are scientifically selected or not. So, vocabulary items should be selected on the basis of the scientific principle.

3. It would be better if the word list presented in the textbook were divided into different parts of speech so that both the teachers and the students could be familiar with the parts of speech and treat the words accordingly.

4. It would be better if the origin of words is mentioned with their etymological meaning in the text or in the glossary.

5. Most of the words are found complex for the ordinary readers. So, it would be better if meaning of the words is mentioned in the text.

### **4.3 Summary**

This research attempts to study the language vocabulary used in medical science in terms of origin, parts of speech, frequency, syllable structure, morphological structure and complexity have been analyzed and interpreted in the present study.

The study is mainly based on descriptive research design. The data for the study were collected to analyze from the textbooks of PCL Nursing, Community Health Nursing and Behavioural Science: Psychiatric Nursing (up to unit three). They were analyzed according to the research objectives. In case of origin, the researcher has found most of the words are derived from Ancient Greek and Greek. Under parts of speech, major word class and their frequency have been dealt here. Structure and complexity are also analyzed in the present research.

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## Appendix I

### Some of the Selected Terminologies with their Origin

Prefix or suffix	Meaning	Origin language and etymology	Example(s)
<b>a-, an-</b>	Denotes an absence of, without	Ancient Greek,	<a href="#">Apathy</a> , <a href="#">Analgia</a>
<b>ab-</b>	Away	Latin	<a href="#">Abduction</a>
<b>abdomin(o)-</b>	Of or relating to the <a href="#">abdomen</a>	Latin,	<a href="#">Abdomen</a>
<b>-ac, -acal</b>	pertaining to	Greek	<a href="#">cardiac</a> , hydrophobic,
<b>acanth(o)-</b>	thorn or spine	Ancient Greek	acanthion, <a href="#">acanthocyte</a> ,
<b>acous(io)-</b>	Of or relating to <a href="#">hearing</a>	Greek	<a href="#">acoumeter</a> , <a href="#">acoustician</a>
<b>acr(o)-</b>	extremity, topmost	Greek	<a href="#">Acrocrahy</a> , <a href="#">acromegaly</a> ,
<b>-acusis</b>	Hearing	Greek	<a href="#">paracusis</a>
<b>-ad</b>	toward, in the direction of		Dorsad
<b>ad-</b>	increase, adherence, motion toward, very	Latin	<a href="#">Adduction</a>
<b>aden(o)-, aden(i)-</b>	Of or relating to a <a href="#">gland</a>	Ancient Greek	<a href="#">Adenocarcinoma</a> ,
<b>adip(o)-</b>	Of or relating to <a href="#">fat</a> or fatty tissue	Latin	<a href="#">Adipocyte</a>
<b>adren(o)-</b>	Of or relating to <a href="#">adrenal glands</a>	Latin	<a href="#">adrenal artery</a>
<b>-aemia (BrE)</b>	<a href="#">blood</a> condition	Greek	<a href="#">Anaemia</a>
<b>aer(o)-</b>	air, gas	Greek	<a href="#">Aerosinusitis</a>
<b>aesthesio- (BrE)</b>	Sensation	Greek	<a href="#">Anesthesia</a>
<b>-al</b>	pertaining to	Latin	<a href="#">abdominal</a>
<b>alb-</b>	Denoting a white or pale color	Latin	<a href="#">Albino</a>
<b>alge(si)-</b>	<a href="#">pain</a>	Greek	<a href="#">Analgesic</a>
<b>-algia</b>	Pain	Greek	<a href="#">Myalgia</a>
<b>alg(i)o-</b>	Pain	Greek	<a href="#">Myalgia</a>
<b>allo-</b>	Denoting something as different, or as an addition	Ancient Greek	<a href="#">Alloantigen</a> , <a href="#">allopathy</a>
<b>ambi-</b>	Denoting something as positioned on both sides;	Latin	<a href="#">Ambidextrous</a>

	Describing both of two		
<b>amnio-</b>	Pertaining to the membranous fetal sac (amnion)	Greek	<a href="#">Amniocentesis</a>
<b>amph-,amphi-</b>	on both sides	Greek	<a href="#">Amphicrania,</a>
<b>an-</b>	not, without	Greek	<a href="#">Analgesia</a>
<b>ana-</b>	back, again, up	Greek	<a href="#">Anaplasia</a>
<b>an(o)</b>	<a href="#">anus</a>	Latin	
<b>andr(o)-</b>	pertaining to a <a href="#">man</a>	Greek	<a href="#">Andrology, android</a>
<b>angi(o)-</b>	<a href="#">blood vessel</a>	Greek	<a href="#">Angiogram</a>
<b>aniso-</b>	Describing something as unequal	Ancient Greek	<a href="#">Anisotropic, anisocytosis</a>
<b>ankyl(o)-,ancyl(o)-</b>	Denoting something as crooked or bent	Ancient Greek	<a href="#">Ankylosis</a>
<b>ante-</b>	Describing something as positioned in front of another thing	Latin	<a href="#">antepartum</a>
<b>anti-</b>	Describing something as 'against' or 'opposed to' another	Ancient Greek	<a href="#">Antibody, antipsychotic</a>
<b>apo-</b>	separated from, derived from	Ancient Greek	<a href="#">Apoptosis</a>
<b>arch(i,e,o)</b>	first, primitive		archinephron :
<b>arsen(o)-</b>	Of or pertaining to a male; masculine	Greek	
<b>arteri(o)-</b>	Of or pertaining to an <a href="#">artery</a>	Ancient Greek	<a href="#">Artery, Arteriole</a>
<b>arthr(o)-</b>	Of or pertaining to the joints, limbs	Ancient Greek	<a href="#">Arthritis</a>
<b>articul(o)-</b>	Joint	Latin articulum	<a href="#">Articulation</a>
<b>-ary</b>	pertaining to	Latin <i>-arius</i>	<a href="#">biliary tract</a>
<b>-ase</b>	<a href="#">enzyme</a>	Greek διάστασις, division	<a href="#">Lactase</a>
<b>-asthenia</b>	<a href="#">weakness</a>	Greek, ἀσθένεια	<a href="#">Myasthenia gravis</a>
<b>atel(o)</b>	imperfect or incomplete development		atelocardia :
<b>ather(o)-</b>	fatty deposit, Soft gruel-like deposit		<a href="#">Atherosclerosis</a>
<b>-ation</b>	Process	Latin	<a href="#">Habitation, Lubrication</a>
<b>atri(o)-</b>	an atrium (esp. heart atrium)		Atrioventricular
<b>aur(i)-</b>	Of or pertaining to the ear	Latin	<a href="#">Aural</a>

<b>aut(o)-</b>	Self	Greek	<a href="#">Autoimmune</a>
<b>aux(o)-</b>	increase; growth		auxocardia
<b>axill-</b>	Of or pertaining to the armpit	Latin	<a href="#">Axilla</a>
<b>azo(to)</b>	nitrogenous compound		azothermia

## B

Prefix/suffix	Meaning	Origin language and etymology	Example(s)
<b>balano-</b>	Of the <a href="#">glans penis</a> or <a href="#">glans clitoridis</a>	Greek	<a href="#">Balanitis</a>
<b>bi-</b>	twice, double	Latin	Binary
<b>bio-</b>	Life	Ancient Greek βίος	<a href="#">Biology</a>
<b>blast(o)-</b>	<a href="#">germ</a> or bud	Greek	<a href="#">Blastomere</a>
<b>blephar(o)-</b>	Of or pertaining to the eyelid	Ancient Greek	<a href="#">Blepharoplast</a>
<b>brachi(o)-</b>	Of or relating to the arm	Latin	<a href="#">Brachium of inferior colliculus</a>
<b>brachy-</b>	Indicating 'short' or less commonly 'little'	Ancient Greek	<a href="#">brachycephalic</a>
<b>brady-</b>	'slow'	Ancient Greek	<a href="#">Bradycardia</a>
<b>bronch(i)-</b>	<a href="#">bronchus</a>		<a href="#">Bronchiolitis obliterans</a>
<b>bucc(o)-</b>	Of or pertaining to the cheek	Latin	<a href="#">Buccolabial</a>
<b>burs(o)-</b>	<a href="#">bursa</a> (fluid sac between the bones)	Latin	<a href="#">Bursitis</a>

## C

Prefix or suffix	Meaning	Origin language and etymology	Example(s)
<b>capill-</b>	Of or pertaining to hair	Latin	<a href="#">Capillus</a>
<b>capit-</b>	Pertaining to the head (as a whole)	Latin head	<a href="#">Capitation</a>
<b>carcin(o)-</b>	<a href="#">cancer</a>	Greek	<a href="#">Carcinoma</a>
<b>cardi(o)-</b>	Of or pertaining to the heart	Ancient	<a href="#">Cardiology</a>
<b>carp(o)-</b>	Of or pertaining to the wrist	Latin	<a href="#">Carpopedal</a>
<b>cata-</b>	down, under	Greek	<a href="#">Cataract</a>
<b>-cele</b>	pouching, <a href="#">hernia</a>	Ancient Greek	<a href="#">Hydrocele, Varicocele</a>

<b>-centesis</b>	surgical puncture for <a href="#">aspiration</a>	Ancient Greek	<a href="#">Amniocentesis</a>
<b>cephal(o)-</b>	Of or pertaining to the head (as a whole)	Ancient Greek	<a href="#">Cephalalgia</a>
<b>cerat(o)-</b>	Of or pertaining to the <a href="#">cornu</a> ; a horn	Ancient Greek	<a href="#">Ceratoid</a>
<b>cerebell(o)-</b>	Of or pertaining to the <a href="#">cerebellum</a>	Latin	<a href="#">Cerebellum</a>
<b>cerebr(o)-</b>	Of or pertaining to the brain	Latin	<a href="#">Cerebrology</a>
<b>cervic-</b>	Of or pertaining to the neck, the <a href="#">cervix</a>	Latin	<a href="#">Cervicodorsal</a>
<b>chem(o)-</b>	chemistry, drug	Greek	<a href="#">Chemotherapy</a>
<b>chir(o)-, cheir(o)-</b>	Of or pertaining to the hand	Ancient Greek	<a href="#">Chiropractor</a>
<b>chlor(o)-</b>	Denoting a green color	Ancient Greek	<a href="#">Chlorophyll</a>
<b>chol(e)-</b>	Of or pertaining to bile	Ancient Greek	Cholaemia
<b>cholecyst(o)-</b>	Of or pertaining to the <a href="#">gallbladder</a>	Ancient Greek	<a href="#">Cholecystectomy</a>
<b>chondr(i)o-</b>	cartilage, gristle, granule, granular	Ancient Greek	<a href="#">Chondrocalcinosis</a>
<b>chrom(ato)-</b>	Color	Ancient Greek	<a href="#">Hemochromatosis</a>
<b>-cidal, -cide</b>	killing, destroying	Latin	Bacteriocidal
<b>cili-</b>	Of or pertaining to the <a href="#">cilia</a> , the eyelashes; eyelids	< Latin	<a href="#">Ciliary</a>
<b>circum-</b>	Denoting something as 'around' another	Latin	<a href="#">Circumcision</a>
<b>cis-</b>	on this side	Latin	
<b>clast</b>	Break	Greek	Osteoclast
<b>co-</b>	with, together, in association	Latin	Coenzymes
<b>col-, colo-, colono-</b>	<a href="#">colon</a>		<a href="#">Colonoscopy</a>
<b>colp(o)-</b>	Of or pertaining to the vagina	Ancient Greek	<a href="#">Colposcopy</a>
<b>com-</b>	with, together	Latin	
<b>contra</b>	Against	Latin	<a href="#">Contraindicate</a>
<b>cor-</b>	with, together	Latin	
<b>cor-, core-, coro-</b>	Of or pertaining to eye's pupil	Ancient Greek	<a href="#">Corectomy</a>
<b>cordi-</b>	Of or pertaining to the heart [ <i>Uncommon as a prefix</i> ]	Latin	<a href="#">Commotiocardis</a>
<b>cornu-</b>	Applied to processes and parts of the body describing them likened or similar to horns	Latin horn	

<b>coron(o)-</b>	Crown	Latin	
<b>cost(o)-</b>	Of or pertaining to the ribs	Latin	<a href="#">Costochondral</a>
<b>cox-</b>	Of or relating to the hip, haunch, or hip-joint	Latin	<a href="#">Coxopodite</a>
<b>crani(o)-</b>	Belonging or relating to the <a href="#">cranium</a>	Latin	<a href="#">Craniology</a>
<b>-crine</b>	to secrete	Latin	<a href="#">Endocrine</a>
<b>cry(o)-</b>	Cold	Greek	<a href="#">Cryoablation</a>
<b>cutane-</b>	Skin	Latin	<a href="#">Subcutaneous</a>
<b>cyan(o)-</b>	Denotes a blue color	Ancient Greek	<a href="#">Cyanopsia</a>
<b>cycl-</b>	circle, cycle	Greek	
<b>cyph(o)-</b>	Denotes something as bent ( <i>uncommon as a prefix</i> )	Ancient Greek	<a href="#">Cyphosis</a>
<b>cyst(o)-, cyst(i)-</b>	Of or pertaining to the <a href="#">urinary bladder</a>	Ancient Greek	<a href="#">Cystotomy</a>
<b>cyt(o)-</b>	<a href="#">cell</a>	Greek	<a href="#">Cytokine</a>
<b>-cyte</b>	Cell	Greek	<a href="#">Leukocyte</a>

## D

Prefix/suffix	Meaning	Origin language and etymology	Example(s)
<b>dacryo-</b>	Tear	Greek	
<b>dactyl(o)-</b>	Of or pertaining to a finger, toe	Ancient Greek	<a href="#">Dactylogy</a>
<b>de-</b>	away from, cessation	Latin	
<b>dent-</b>	Of or pertaining to teeth	Latin	<a href="#">Dentist</a>
<b>dermat(o)-, derm(o)-</b>	Of or pertaining to the skin	Ancient Greek	<a href="#">Dermatology</a>
<b>-desis</b>	Binding	Greek	Arthrodesis
<b>dextr(o)-</b>	right, on the right side	Latin	<a href="#">Dextrocardia</a>
<b>di-</b>	Two	Greek	<a href="#">Diplopia</a>
<b>di-</b>	apart, separation	Latin	
<b>dia-</b>	( <i>same as Greek meaning</i> )	Ancient Greek	<a href="#">Diacetyl</a>
<b>dif-</b>	apart, separation	Latin	
<b>digit-</b>	Of or pertaining to the finger [ <i>rare as a root</i> ]	Latin	<a href="#">Digit</a>
<b>-dipsia</b>	suffix meaning "(condition of) thirst"		<a href="#">polydipsia</a>

<b>dis-</b>	separation, taking apart	Latin	<a href="#">Dissection</a>
<b>dors(o)-, dors(i)-</b>	Of or pertaining to the back	Latin	<a href="#">dorsal</a> , <a href="#">Dorsocephalad</a>
<b>duodeno-</b>	duodenum, twelve:	Latin	<a href="#">Duodenal atresia</a>
<b>dynam(o)-</b>	force, energy, power	Greek	
<b>-dynia</b>	Pain		<a href="#">Vulvodynia</a>
<b>dys-</b>	bad, difficult	Greek	<a href="#">Dysphagia</a> ,

## E

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>-eal</b>	pertaining to	Latin	
<b>ec-</b>	out, away	Greek	
<b>ect(o)-</b>	outer, outside	Greek	<a href="#">Ectopic pregnancy</a>
<b>-ectasis, -ectasia</b>	expansion, <a href="#">dilation</a>	Ancient Greek	<a href="#">Bronchiectasis</a> ,
<b>-ectomy</b>	Denotes a surgical operation or removal of a body part. Resection, excision	Ancient Greek	<a href="#">Mastectomy</a>
<b>-emesis</b>	<a href="#">vomiting</a> condition	Greek	<a href="#">Hematemesis</a>
<b>-emia</b>	<a href="#">blood</a> condition (AmE)	Greek	<a href="#">Anemia</a>
<b>encephal(o)-</b>	Of or pertaining to the brain. Also see Cerebro.	Ancient Greek	<a href="#">Encephalogram</a>
<b>endo-</b>	Denotes something as 'inside' or 'within'	Ancient Greek	<a href="#">Endocrinology</a> ,
<b><a href="#">eosin(o)-</a></b>	Red	Greek	<a href="#">Eosinophil granulocyte</a>
<b>enter(o)-</b>	Of or pertaining to the intestine	Ancient Greek	<a href="#">Gastroenterology</a>
<b>epi-</b>	<i>[Same as Greek meaning: on, upon]</i>	Ancient Greek	<a href="#">Epitaxis</a> , <a href="#">epicardium</a> , <a href="#">episclera</a> , <a href="#">epidural</a>
<b>episi(o)-</b>	Of or pertaining to the pubic region, the loins	Ancient Greek	<a href="#">Episiotomy</a>
<b>erythr(o)-</b>	Denotes a red color	Ancient Greek	<a href="#">Erythrocyte</a>
<b>-esophageal, -esophago</b>	gullet (AmE)	Greek	
<b>esthesio-</b>	sensation (AmE)	Greek	
<b>eu-</b>	true, good, well, new	Greek	<a href="#">Eukaryote</a>
<b>ex-</b>	out of, away from	Latin	<a href="#">Exophthalmos</a>



<b>exo-</b>	Denotes something as 'outside' another	Ancient Greek	<a href="#">Exoskeleton</a>
<b>extra-</b>	Outside	Latin	<a href="#">Extradural hematoma</a>

## F

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>faci(o)-</b>	Of or pertaining to the face	Latin	<a href="#">Facioplegic</a>
<b>fibr(o)</b>	Fiber		<a href="#">Fibroblast</a>
<b>filli-</b>	fine, hair like		
<b>-form, -iform</b>	Used to form adjectives indicating 'having the form of'	Latin	<a href="#">Cuneiform</a>
<b>fossa</b>	A hollow or depressed area; trench or channel	Latin	<a href="#">fossa ovalis</a>
<b>front-</b>	Of or pertaining to the forehead	Latin	<a href="#">Frontonasal</a>

## G

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>galact(o)-</b>	Milk	Greek	<a href="#">Galactorrhea</a>
<b>gastr(o)-</b>	Of or pertaining to the stomach	Ancient Greek	<a href="#">Gastric bypass</a>
<b>-gen</b>	(1) Denotes the sense 'born in, from' (2) Denotes the sense 'of a certain kind'	Ancient Greek	(1) <a href="#">Endogen</a> ; (2) <a href="#">Heterogenous</a>
<b>-genic</b>	Formative, pertaining to producing	Greek	<a href="#">Cardiogenic shock</a>
<b>genu-</b>	Of or pertaining to the knee	Latin	<a href="#">Genu valgum</a>
<b>gingiv-</b>	Of or pertaining to the gums	Latin	<a href="#">Gingivitis</a>
<b>glauc(o)-</b>	Denoting a grey or bluish-grey colour	Ancient Greek	<a href="#">Glaucoma</a>
<b>gloss(o)-, glott(o)-</b>	Of or pertaining to the tongue	Ancient Greek	<a href="#">Glossology</a>
<b>gluco-</b>	<a href="#">glucose</a>	Greek	<a href="#">Glucocorticoid</a>
<b>glyco-</b>	<a href="#">sugar</a>		<a href="#">Glycolysis</a>
<b>gnath(o)-</b>	Of or pertaining to the jaw	Ancient Greek	<a href="#">Gnathodynamometer</a>
<b>-gnosis</b>	Knowledge	Greek	<a href="#">diagnosis, progno</a>

			<a href="#">sis</a>
<b>gon(o)-</b>	seed, semen; also, reproductive	Ancient Greek	<a href="#">Gonorrhea</a>
<b>-gram, -gramme</b>	record or picture	Greek	<a href="#">Angiogram</a>
<b>-graph</b>	instrument used to record data or picture	Ancient Greek	<a href="#">Electrocardiograph</a>
<b>-graphy</b>	process of recording		<a href="#">Angiography</a>
<b>gyn(aec)o- (BrE), gyn(ec)o- (AmE)</b>	Woman	Greek	<a href="#">Gynecomastia</a>

## H

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>halluc-</b>	to wander in mind	Classical Latin	<a href="#">Hallucinosi</a>
<b>hemat-, haemato- (haem-, hem-)</b>	Of or pertaining to blood	Latin	<a href="#">Hematology</a> , older form <a href="#">Haematology</a>
<b>hema or hemo-</b>	blood (AmE)	Greek	<a href="#">Hematological malignancy</a>
<b>hemangi or hemangio-</b>	blood vessels		
<b>hemi-</b>	one-half	Ancient Greek	<a href="#">Cerebral hemisphere</a>
<b>hepat- (hepatic-)</b>	Of or pertaining to the liver	Ancient Greek	<a href="#">Hepatology</a>
<b>heter(o)-</b>	Denotes something as 'the other' (of two), as an addition, or different	Ancient Greek	<a href="#">Heterogeneous</a>
<b>hidr(o)-</b>	<a href="#">sweat</a>	Greek	<a href="#">Hyperhidrosis</a>
<b>hist(o)-, histio-</b>	<a href="#">tissue</a>	Greek	<a href="#">Histology</a>
<b>home(o)-</b>	Similar	Ancient Greek	<a href="#">Homeopathy</a>
<b>hom(o)-</b>	Denotes something as 'the same' as another or common	Ancient Greek	<a href="#">Homosexuality</a>
<b>humer(o)-</b>	Of or pertaining to the shoulder (or [rarely] the upper arm)	Incorrect	<a href="#">Humerus</a>
<b>hydr(o)-</b>	Water	Greek	<a href="#">Hydrophobe</a>

<b>hyper-</b>	Denotes something as 'extreme' or 'beyond normal'	Ancient Greek	<a href="#">Hypertension</a>
<b>hyp(o)-</b>	Denotes something as 'below normal'	Ancient Greek	<a href="#">Hypovolemia,</a>
<b>hyster(o)-</b>	Of or pertaining to the womb, the uterus	Ancient Greek I	<a href="#">Hysterectomy</a>

## I

<b>Prefix/suffix</b>	<b>Meaning</b>	<b>Origin language and etymology</b>	<b>Example(s)</b>
<b>-i-asis</b>	Condition	Greek	<a href="#">Mydriasis</a>
<b>iatr(o)-</b>	Of or pertaining to medicine, or a physician [ <i>uncommon as a prefix; common as a suffix, see -iatry</i> ]	Ancient Greek physician	<a href="#">Iatrochemistry</a>
<b>-iatry</b>	Denotes a field in medicine of a certain body component	Ancient Greek	<a href="#">Podiatry,</a> <a href="#">Psychiatry</a>
<b>-ic</b>	pertaining to	Greek -	<a href="#">Hepatic artery</a>
<b>-icle</b>	Small	Latin	<a href="#">Ovarian follicle</a>
<b>-ics</b>	organized knowledge, treatment	Latin	<a href="#">Obstetrics</a>
<b>idio-</b>	self, one's own	Greek	<a href="#">Idiopathic</a>
<b>ileo-</b>	<a href="#">ileum</a>	Greek	<a href="#">Ileocecal valve</a>
<b>infra-</b>	Below	Latin	<a href="#">Infrahyoid muscles</a>
<b>inter-</b>	between, among	Latin	<a href="#">Interarticular ligament</a>
<b>intra-</b>	Within	Latin	<a href="#">Intracranial hemorrhage</a>
<b>ipsi-</b>	Same	Latin	<a href="#">Ipsilateral hemiparesis</a>
<b>irid(o)-</b>	Iris	Greek	<a href="#">Iridectomy</a>
<b>isch-</b>	Restriction	Greek	<a href="#">Ischemia</a>
<b>ischio-</b>	Of or pertaining to the <a href="#">ischium</a> , the hip-joint	Ancient Greek	<a href="#">Ischioanal fossa</a>

## Appendix – 2

### Selected Vocabularies Items Used in Medical science in Terms of Parts of Speech

<b>Word</b>	<b>Meaning</b>	<b>Example sentence</b>
<b>Part of speech</b>		
Abnormal Adj	Not normal for human body	This amount of weight loss is abnormal for women your age.
Ache Noun/verb	Pain that won't go away	I can't sleep because my knees ache in the night.
Acute Adj	Quick to become severe/bad	We knew the baby was coming right away because the women's labor pains were acute.
Allergy noun Allergic adj	A body's abnormal reaction to certain foods or environmental substance (eg causes a rash)	Your son is extremely allergic to peanuts.
Ambulance Noun	Emergency vehicle that rushes people to a hospital	We call the ambulance when josh stopped breathing.
Amnesia Noun	A condition that causes people to lose their memory.	I can't remember the accident because I had amnesia.
Amputation noun Amputate verb	Permanent removal of a limb	We had to amputate his leg because the infection spread so quickly.
Anaemia noun Anaemicadj	Occurs when the body doesn't have enough red blood cells	I have low energy because I amanaemic.
Antibiotics Noun	Medication that kills bacteria and curs infection	My throat infection went away after I started the antibiotics.
Anti-depressant	Medication that helps relieve anxiety and sadness	The anti-depressants helped me get on with life after Lucy died.
Appointment Noun	A schedule meeting with a medical profession	I've made you an appointment with a specialist in three weeks' time.
Arthritis Noun	A disease that cause the joints to become swollen and crippled	My grandmother can't knit anymore because the arthritis in her hands is so bad
Asthma (attack) Noun	A condition that cause a blockage of the airway and make it difficult for a	I carry an inhaler when I run because I have asthma

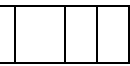
	person to breathe	
Bacteria Noun	A disease-causing organism	To prevent the spread of bacteria it is important that nurse wash their hands often.
Bedsore Noun	Wounded that develop on a patient' body from lying in one place for too long	If you don't get up and take a walk, you will develop painful bedsore
Benign Adj	Not harmful (not cancerous)	We're hoping that the tests will show that the lump in your breast is benign.
Biopsy Noun	Removal of human tissue in order to conduct certain medical tests	The biopsy ruled out a number of illnesses.
Blood count Noun	The amount of red and white blood cell a person has	You will be happy to know that your blood count is almost back to normal.
Blood donor Noun	A person who gives blood to a blood bank or other person	Blood donors have to answer questions about their medical history.
Blood pressure Noun	The rate of which blood flows through the body (high/ low)	High blood pressure puts you at risk of having a heart attack.
Brace Noun	A device that holds injured body parts in place	You will probably always have to wear a brace on your ankle when you jog.
Breech Adj	Position of an unborn baby in which the feet are down and the head is up	We thought it was going to be a breech birth, but the baby turned himself around.
broken adj	A bone that is divided into two or more pieces as a result of an injury	We thought it was just sprain, but it turned out his leg was broken
Bruise noun Bruised adj	Injured body tissue that is visible underneath the skin	The woman was badly bruised when she came into the emergency room.
Caesarean section, C-section noun	Procedure that involves removing a baby from its mother through an incision in the woman's lower abdomen	The baby was so large that we had to perform a Caesarean section.
Cancer Noun	Disease cause by the uncountable growth of cells	There are many different options when it comes to treating cancer.
Cardiopulmonary resuscitation (CPR) Noun	Restoring a person's breath and circulation	You saved your brother's life by performing CPR
Cast noun	A hard bandage that is wrapped around a broken bone to keep it in place	My leg was in a cast for araduation.

Chapel, chapeline noun	A place where loved ones can go to pray for a patient's recovery:  A priest who visit patient in the hospital	Of you want a place to pray, the chapel is on the third floor.
Chemotherapy Noun	Type of a treatment used on cancer patient	My mother has already had three rounds of chemotherapy.
Chickenpox Noun	A virus commonly contracted by children, characterized by itchy spots all over the body	It is best to get chickenpox as a child so that you don't get it worse as an adult.
Coroner Noun	A person who determines the cause of death after a person dies	We only call the coroner if we think a death is suspicious.
Critical condition Noun	Requiring immediate and constant medical attention	You can't see her right now, she's in critical condition
Crutches Noun	Objects that people with injured leg or feet use to help them walk	T'd rather hop on one foot then use crutches.
Cyst Noun	A sac in the body-tissue filled with fluid (sometimes diseased)	We're going to remove the cysts just to be on the safe side.
Deaf Adj	Unable to her	The accident left the patient both deaf and blind.
Deficiency Noun	A lack of something necessary for one's health	The test shows that you have an iron deficiency.
Dehydrated Adj	In need of water	It is easy for the elderly to become dehydrated in this heat.
Dementia Noun	Loss of mental capacity	It is hard to watch a loved one suffering with dementia.
Diabetes Noun	Type of disease typically involving insulin deficiency	People with diabetes have to constantly check their blood sugar levels.
Diagnosis Noun	Medical explanation of an illness of condition	The doctor would prefer to share the diagnosis with the patient himself.
Discomfort Noun	Experiencing pain	This pain medication should relieve some of your discomfort.
Disease noun	A medical disorder that is harmful to a person's health	I understand that this disease runs in your family.

Dislocated Noun	When a bone is temporarily separated from its joint	You will have to be a sling because of your dislocated shoulder.
Emergency Noun	A medical problem that needs immediate attention	It is important that children know which numb to dial in case of an emergency.
ER (emergency room) Noun	The hospital room used for treating patients with immediate and life-threatening injuries	The child was rush into the ER after he had a severe allergic reaction to a bee mouth.
External adj	On the outside	This cream is for external use only. Do not get it near your ears, eyes, or mouth.
False negative Noun Adj	A test that incorrect ly comes back negative	We had two false negative pregnancy tests, so we didn't know we were having a baby
Family history noun	Medical background of a person's family member	The doctor was concerned about my family history of skin cancer
Fatal Adj	Causing death	The doctor made a fatal error when he wrote the wrong prescription.
Fever noun Feverish adj	Higher than normal body temperature	He is very feverish, and his temperature is near danger point
Flu (influenza) Noun	Many types of respiratory or intestinal infractions passed on through a virus	People who have the flu should not visits hospital patients.
Fracture noun Fractured adj	Broken of cracked bone	Your wrist is fracture and needs a cast.
Germ Noun	A micro- organism, especially one that causes disease	Flower are not allowed in the ward to avoid the risk of germs being brought in.
Genetic Adj	A medical condition of physical feature that is passed on in the family	The disease is part genetic and part environment.
Growth Noun	A ball of tissue that grows bigger than normal, either on or under the skin	That growth on your shoulder is starting to worry me.
Heart attack Noun	Instance in which blood stop pumping through the heart	People who smoke are at greater risk of having a heart attack.
HIV Noun	The virus that infects the human T- cells and leads to AIDS	HIV can be passed down from the mother to her fetus.

Hives Noun	Bumps that appear on the surface of the skin during an allergic reaction	I broke out in hives after I ate that potato casserole.
Illness noun Ill adj	General term for any condition that makes a person feel sick for a certain period o time	Her illness went away when she started eating better.
Immune system Noun	The part of the body that fight diseases, infections, and viruses	You can't have visitors because your immune system is low.
Immunization noun Immunize verb	Am injection that protects against specific disease	Babies are immunized three times in their final year.
Incision Noun	Cut in the body made during surgery	I had to have stitches to close the incision
Inconclusive adj	Unclear	We have to do more x-rays because the first ones were inconclusive.
Infant noun	Young baby	The nurse will demonstrate how to bathe an infant.
infection noun infected adj	Disease around the body (viral or bacterial)	The wound should be covered when you swim prevent it from becoming infected.
Inflamed Adj	Appearance (red and swollen) of an injured body part	My right ankle was minor: just a few cuts and bruises.
Injury Noun	Damage to the body	Her injuries were minor: just a few cuts and bruises.
Intensive care unit (ICU) Noun	Section of the hospital where patients get constant attention and doctors rely on specialization equipment	She will remain in the ICU until she can breathe on her own.
Internal Adj	Under the skin, inside the organs	The doctor will be monitoring her for any internal bleeding.
Itchy Adj	Feeling discomfort on the skin's surface	If you are allergic to this medication your skin will get red and itchy.
IV Noun	A tube that pumps liquids and medication into a patient's body	The toddler was so dehydrated that the doctor decided to get him on an IV.
Lab results Noun	Tests that come back from a laboratory and help doctor make a diagnosis	The lab results have come in and you are free to go home.





Lab (laboratory) noun	Place where samples of blood/ urine etc. are taken for testing	I'll take these samples down to the lab on my way out.
Life support noun	A machine that keeps patients alive by helping them breathe	The woman has severe brain damage and is currently on life support.
Life-threatening Adj	When injuries and conditions are extremely serious	The victim was shot in two places but the bullet wounds are not life- threatening
Light- headed Adj	Feeling of dizziness and being off- balance, caused by lack of oxygen in the brain	If you are feeling light- headed again, lie down and call me.
Malignant Adj	Expected to grow and get much worse (especially related to cancerous cells)	I'm afraid at least one of the tumors is malignant.
Medical school (med school) noun	Place where some trains to be a doctor	After eight year of medical school I can final practice medicine.
New born noun	an infant that is less than three months old	you have to support her neck because she is still a newborn
numb adj	no feeling in a certain body part	the niddle will makde your lower body feel numb

### Appendix III

#### Vocabulary Items in Terms of Parts of Speech

S. N.		Table No. of words	A / GK	Per %	Latin	Per %
1	Nouns	314	194	61.78	120	38.21
2	Verbs	168	98	58.33	70	41.33
3	Adj.	58	39	67.24	19	32.75
4	Adv.	49	28	57.14	21	42.85

#### Frequency of Noun

SN.	Nouns	Singular	Plural	Frequency
1	Microgram	5	6	11
2	Calcium	5		5
3	Instruction	7		7
4	Composition	17		17
5	Lactating	13		13
6	Pregnant	17		17
7	Patient	16		16
8	Neuron- muscular	7		7
9	Baby	3	7	10
10	Adult	3	8	11
11	Severe	6		6
12	Inflection	5		5
13	Absorption	5		5
14	Physician	5	6	11
15	Pharmacy	4	7	11
16	Clinic	5		5
17	Prescription	6		6
18	Sensitivity	8		8
19	ML	5		5
20	Tablet	4	4	8
21	Ulcer	5		5
22	Reaction	6		6
23	Injection	6		6
24	Nicotinic Acid	6		6
25	Folic Acid	5		5
26	Blood Pressure	5		5
27	Uric – Acid	5		5
28	Urinary drug	5	3	8
29	Medicine	5	2	7
30	Price	5		5
31	Practitioner	4	3	7
32	Place	4	3	7
33	Ache	5		5
34	Ambulance	5		5
35	Amnesia	5		5
36	Amputation	5		5
37	Anemia	5		5
38	Anti-depressant	6		6
39	Appointment	5		5

40	Arthritis	5		5
41	Asthma	5		5
42	Bacteria	5		5
43	Bedsore	5		5
44	Biopsy	5		5
45	Blood count	5		5
46	Blood donor	5	2	7
47	Brace	5		5
48	Bruise	5		5
49	Section	5	2	7
50	Cancer	6		6
51	Resuscitation	5		5
52	Cast	5		5
53	Chapel	5		5
54	Chapeline	5		5
55	Chemotherapy	3	1	4
56	Chicken pox	5		5
57	Coroner	6		6
58	Critical condition	6		6
59	Cyst	6		6
60	Deficiency	6	2	8
61	Dementia	6		6
62	Diabetes	5		5
63	Diagnosis	6		6
64	Discomfort	6		6
65	Emergency room	3	3	6
66	Family history	6		6
67	Fever	9		9
68	Flu	7		7
69	Fracture	6	3	9
70	Germ	5	6	11
71	Growth	5		5
72	Heart attack	9		9
73	HIV	9		9
74	Life	3	6	9
75	Illness	5		5
76	Immune – system	5	3	8
77	Incision	6		6
78	Infant	5	3	8
79	Infection	5	6	11
80	Inflection	6		6
81	Injury	7		7
82	ICU	7		7
83	IV	6		6
84	Lab result	6		6
85	Lab	6		6
86	Life support	6		6
87	Medical school	7	2	9
88	New born	8		8
89	OR/ Operating room	5	4	9
90	Operation	4	3	7
91	Pain killer	7		7
92	Pain reliever	7		7

93	Physician			
94	Poison	6		6
95	Privacy	7		7
96	Radiation	9	6	15
97	Residency	7	4	11
98	Resident	5	4	9
99	Routine	5	2	7
100	Scrub	5	4	9
101	Second opinion	5		5
102	Seizure	5	4	9
103	Shock	6	6	12
104	Spasm	5		5
105	Specialist	6	5	11
106	Sprain	6		6
107	Stable	7		7
108	Sting	6		6
109	Stress	6		6
110	Swelling	9		9
111	Symptom	5	7	12
112	Temperature	5	3	8
113	Test – result	6		6
114	Therapy	7		7
115	Transplant	7		7
116	Ultra sound	6	1	7
117	Umbilical	9		9
118	Umbilical cord	9		9
119	Urine sample	7		7
120	Virus	16		16
121	Vein	10		10
122	Visiting hours		6	6
123	Ward	11		11
124	Wheel chair	9	6	15
125	Wound	10	11	21
126	X – Ray	10		10
127	Hard – ness	6		6
128	Softness	7		7
129	Smoothness	7		7
130	Connection	6	2	8

### Frequency of Occurrence of the Verbs

S.N	Verbs	Freq
1	Take	17
2	Do	17
3	Do not	19
4	Authorized	17
5	Sold	16
6	Manufactured	12
7	Keep	13
8	Contains	13
9	Registered	9
10	Vomiting	15
11	Bleeding	15
12	Lactating	16
13	X – Ray	6
14	Sting	6
15	Sprain	6
16	Scrub up	6
17	Prescribe	9
18	Operate on	9
19	Immunize	9

19	Immunize	9
20	Amputate	7
21	Ache	6
22	Established	7
23	Documented	8
24	Development	6
25	Lasting	7
26	Obsolete	7
27	Known	6
28	Opened	1
29	Anatomical work	6
30	Practice	6
31	Observe	7
32	Respect	6
33	Attempts	7
34	Understanding	8
35	Improved	8
36	Pronounced	8
37	Towering	7
38	Considered	7
39	Associated	7

40	Training	7
41	Included	9
42	Interact	7
43	Given	7
44	Describe	8
45	Assumes	7
46	Aspiring	8
47	Performed	8
48	Alludes	6
49	Writing	16
50	Found	16
51	Treatment	15
52	Functioned	11
53	Finding	13
54	Dedicated	11
55	Healing	5
56	Induced	6
57	Received	6
58	Fulfilled	11
59	Provided	11
60	Controlled	9
61	Believed	8
62	Devoted	7
63	Arranged	7
64	Served	6

### Frequency of Adjective

SN.	Adjectives	Freq
1	Abnormal	19
2	Acute	15
3	Anemic	14
4	Benign	14
5	Breech	12
6	Broken	11
7	Deaf	8
8	Dehydrated	7
9	Dislocated	7
10	External	6
11	False Negative	5
12	Fatal	5
13	fractured	5
14	Genetic	4
15	ill	3
16	Inconclusive	3
17	Inflamed	3
18	Internal	3
19	Itchy	2
20	Life threatening	2
21	Light hearted	2
22	Malignant	2
23	Numb	2
24	Paralyzed	2
25	Prenatal	2
26	Private	2
27	Sore	2
28	Stressed	2
29	Swollen	2

30	Tender	2
31	Unconscious	2
32	Wounded	2
33	Yellow	2
34	Absent	1
35	Alphabetical	1
36	Beautiful	1
37	Different	1
38	Double	1
39	Fair	1
40	False	1
41	Final	1
42	God	1
43	Great	1
44	Hard	1
45	Interesting	1

46	Left	1
47	Near	1
48	Rich	1
49	Ripe	1
50	Sad	1
51	Same	1
52	Soft	1
53	Spare	1
54	Suitable	1
55	Sunny	1
56	Sure	1
57	Thin	1
58	Tired	1

### Frequency of Adverbs

S.N	Adverbs	Freq.
1	Where	24
2	When	19
3	There	18
4	Not	17
5	O' clock	14
6	Very	13
7	Yesterday	13

8	Why	12
9	How	8
10	Down	7
11	Orally	7
12	Too	5
13	Well	5
14	Again	4

15	Always	4
16	Away	4
17	Both	4
18	Enough	4
19	Now	3
20	Also	3
21	Fast	3
22	Just	3
23	Last	3
24	Then	2
25	Ago	2
26	Already	2
27	Here	2
28	A lot	2
29	Quickly	2

30	Still	2
31	Tomorrow	1
32	At last	1
33	Back	1
34	Correctly	1
35	Eagerly	1
36	Carly	1
37	Everyday	1
38	Finally	1
39	Happily	1
40	Later	1
41	Nowhere	1
42	One day	1
43	Only	1
44	Probably	1
45	Quite	1
46	Really	1
47	Straight	1
48	Swiftly	1
49	Together	1

### Syllable Structures of Vocabularies

S.N.	Parts of Speech	Heavy	Percent	Light	Percent
1	Noun	205	65.28	109	34.71
2	Verb	113	67.26	55	23.73
3	Adjective	37	63.79	21	36.20
4	Adverb	31	63.26	18	36.73
Total		386		203	

### Morphological Structure of the Vocabulary

S.N	Parts of Speech	Total	Monomorphic	Percent	Polymorphic	Percent
1	Noun	314	231	84.07	83	15.93
2	Verb	168	86	50.84	82	49.6
3	Adjective	58	40	68.96	18	31.03
4	Adverb	49	36	73.47	13	26.53
Total		589	403		196	

