Genre-based Analysis of English Patient Information Leaflets (PILs)
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ABSTRACT

Genre-based studies offer an insight to linguistic researchers as well as EFL, ESP teachers which can be used in instruction. This study sought to identify the rhetorical structures of Patient Information Leaflets (PILs). This research is a genre analysis that aimed at identifying the macro- and micro-structure of PILs. Thirty PILs were analyzed in this study. The microstructure analysis was done at two levels of move and step. The analysis is done based on Swales’ (1990) model. The overall macro- and micro-structure of PIL is recognized. The results of the analysis indicated that PILs were composed of 17 sections, and each section had its own particular move-step framework.

Keywords: genre, move, step

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Introduction

Genre analysis aimed at, first to characterize typical and conventional aspects and structural elements of any genre-specific text in an attempt to find theoretically adequate and pedagogically useable patterns and form-function relation; second to explain such a characterization in the context of the communicative rationale and socio-cultural as well as cognitive constrains operating in the relevant area of specialization (Bhatia, 1993; Swales, 1990).

Genre analysis has attracted so much attention since the early 1980. Genre, which has traditionally been a literary concept, has recently become a popular framework for analyzing the form and rhetorical function of non-literary discourse (Candlin, 1993). Linguistics and language teachers have tried to apply genre-centered-approaches to the analysis of written and spoken discourse in order to provide satisfactory models and descriptions for academic and scientific text and also help non-native speaker students to enhance their ability of understanding and proper production of text (Dudley-Evans, 1986).

The first scholar who introduced the concept of genre in English for Specific Purposes (ESP) was Swales (1990). He defined the term genre as “conventionalized communication event whose form and linguistic features are determined by practices and conventions of discourse community to which the text is addressed” (p. 58). The definition implies that when linguistic features of communication event are analyzed, the specific social context where it is used should be taken into consideration.

Swales (1990) asserted that genre analysis essentially is based on two central assumptions. First, the feature of a similar group of text depends on the social context of their creation and use. Second, those features can be described in a way that relates a text to other texts like it. He introduced two other concepts, move and step, in the field of genre analysis. Move is a seminal unit relevant to the writer’s purpose. Steps spell out more specifically the rhetorical means of realizing the function of move, the set of steps for a move is the set of rhetorical choices.

Many linguistic features made up a text segment like lexical meaning, prepositional meaning, illocutionary force, etc. These features give the segment a uniform orientation and signal the
concepts of discourse in it. A move can be realized by one step or the combination of steps. It captures the function and purpose of a segment of a text at a more general level; however, steps spell out more specifically the rhetorical means of realizing the function of move, the set of steps for a move is the set of rhetorical choices.

Biber (1988) made a distinction between genre and text type in this way genre is based on external and non-linguistic features, while text type is defined by internal and linguistic characteristics of a text. A genre can be viewed as a category assigned on the basis of external criteria like intended audience, purpose and activity type which refers to a conventional and culturally recognized grouping of text based on properties other than (linguistic) criteria forming the basis of text type categories. External criteria which determine genre categories are assigned based on use rather than form.

Swales’ (1990) model has attracted the attention of the researchers working on medical genre (Nwogu, 1997; Samarj, 2000). But except medical research articles the other types of medical text have been ignored. Conducting ample of researches (Nwogu, 1997; Rezaei & Sayfouri, 2009; Samarj, 2000; Williams, 1999) on medical research articles is an obvious evidence for the importance of these kinds of texts; other medical texts like medical brochures, patient information leaflets (PILs), drug labels, and medical postures get less attention. Because of their large number of intended audience and the importance of their content, PILs are considered to be one of the most important text types in the field of medicine. It is surprising that this kind of text genre has got no attention up to now. So, the present study is a genre-based analysis of PILs which focuses on the identification of their rhetorical structure.

Some studies were conducted to evaluate the quality of leaflets by means of readability formulae, but they were limited in their scope for improving the quality of the information leaflets. Information should be designed in a way that attracts, motivates and promotes the readers’ understanding (Twomey, 2001).

It is well known that patients forget or misunderstand much of the consultation content. A study conducted by Savage (1992) showed that on average, patients forget half of what the doctor had tell them within 5 minutes of leaving the consultation. In general, people may only retain about 20% of what they hear, also the average adult forgets half of what he or she is told within a few minutes, but this may be decreased if there is additional visual or written input.
So, it seems to be crucial to back up verbal advice with written material. As patients are unreliable witnesses to the consultation, leaflets should be used to compensate these inadequacies, and to bring patients’ knowledge in line with the correct medical information (as cited in Dixon-Wood, 2001). PIL audiences prefer information that is easy to understand with sufficient detail to fulfill their needs. The essential steps in the advancement of health education material are evaluating them by the target groups, providing pictures and visual aids to increase their comprehension, representing needs of various ages, genders, and different levels of literacy (Elliot & Shenker, 2009). As Dixon-Wood (2001) supposed, a crucial condition for success of information is that the massage is reached and comprehended, interpreted, and understood by the reader as intended by the writer.

Another important characteristic of the PILs that makes them appropriate to be selected as the material for analysis in this study is their authenticity. Widdowson (1979) argues that authenticity is achieved when the readers interpret the intention of writer and respond correctly to it. Some teachers prefer authentic texts in which nothing has been changed, but the others favor simulated authentic materials in which some changes have been done to assist learner. Materials are classified into 3 types; “authentic” not written for language learners, but for natives, “pedagogic” specially written for the learners of language (these texts have a pedagogic goal), and “adopted” simulated authentic texts according to learner’s level and need. According to this definition, PILs can be categorized as authentic materials.

Method

Corpus

To analyze the generic structure of PILs, 30 PILs were collected. According to the aim of the study the sample is restricted to PILs which are written in English, not the translated version. Translated PILs were counted out to prevent probable effect of translation on the rhetorical structure of the material.

Analytical Framework

The genre analysis model that is applied as the rhetorical framework for this study is Swales’ (1990) model. The analysis of the material based on the analytical framework was
administered in two parts: analysis of the macrostructure division in a text, and identifying comprising moves and steps of these identified macrostructures of the PILs.

Macrostructure is a significant aspect of discourse which co-occurs with other discourse structures in a text; it is the sequences of a text. The macrostructure of this study is the fundamental sections of the PILs. Move is the next structural division down this hierarchy. As Holmes (1997, p. 325) defines, move is “a segment of text that is shaped and constrained by specific communicative purpose”. Each move is consisted of a number of elements or steps that are combined to constitute information in the move.

Data analysis

In analyzing both the macrostructure and move structure the concept of communicative purpose is central. To analyze the macrostructure, PILs were carefully read and the communicative purpose of each section was noted. For Analyzing Move-Step Structure each macrostructural section found in the first stage of the analysis was analyzed in order to detect its move structure. The main concern is to demonstrate the discovered structure in relation to what the text was rhetorically trying to achieve. Bhatia (1993) declared that in spite of the fact that surface signals are fairly valid indicators of discourse functions, the final criteria for attributing discourse values is functional rather than formal. So, the accuracy of these signals is judged against the function of each move in the overall section. Identifying the boundaries facilitates move identification.

Results and Discussion

Macrostructure Analysis

PIL embodies crucial information across different issues to aid and guide their intended readers. These materials are categorized in different sections. They are presented under specified headings based on their subject matter, so readers can move easily through the text and find their required information. As the table below demonstrates, there are 17 sections in PILs. Proposing a unified arrangement, all PILs section sequences are closely inspected and this reported order is distinguished as the most dominant pattern. The sequence of PILs section including:
<table>
<thead>
<tr>
<th>No</th>
<th>Sections</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Composition</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Pharmacodynamics and pharmacokinetic properties</td>
<td>19</td>
<td>63.33</td>
</tr>
<tr>
<td>3</td>
<td>Indications</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Dosage and administration</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Contraindications</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Special warnings and precautions</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>Interactions</td>
<td>29</td>
<td>96.66</td>
</tr>
<tr>
<td>8</td>
<td>Side effects</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>Pregnancy and lactation</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>Drivers and machine users</td>
<td>26</td>
<td>86.66</td>
</tr>
<tr>
<td>11</td>
<td>Over dose</td>
<td>28</td>
<td>93.33</td>
</tr>
<tr>
<td>12</td>
<td>What you should do in the case you miss a dose?</td>
<td>12</td>
<td>40</td>
</tr>
</tbody>
</table>
Table 1 shows the frequencies of comprising sections of PILs. These sections may be presented as a single section, subsection, or even their materials are given without any discrete title. In spite of the same messages sections try to convey, their titles are not the same through all PILs. Some titles are stated in question form, while others use sentence, clause or even a word as a heading. The titles reported above are the most frequent among the others.

As the above table demonstrates, there are 17 sections in PILs. Each section presents specific content information to the readers, which are analyzed and reported in separate tables in the next coming parts. These sections are considered as PILs macrostructure. Like the title format and the content rhetorical structure, the section arrangements are also different across the corpus. Proposing a unified arrangement, all PILs section sequences are closely inspected and the above reported order is distinguished as the most dominant pattern.

The macrostructure of the PILs that are produced in the same country has more similarity, and this similarity increases if they have been produced by the same company. It can be concluded that each company has designed its own template for writing PILs. Though there are some cases that the PILs of the same company have heterogeneous rhetorical structure, it may be due to different properties of medicines they are enclosed with. For example, side effects of one drug outnumber the other, or some do not have any interactions to be mentioned and to allocate a separate section to it, etc.
PILs may merge more than one section under a single title, the opposite cases were also observed, in which the content of a single section splits to more than one section, or the content of a section is explained in a separate paragraph, but no title has been assigned to it.

**Microstructure Analysis**

The sections, presented in Table 1 are analyzed and their moves and steps, if there is any, are identified and shown in the following subsections. The messages their contents try to convey are explained, frequencies and percentages of moves occurrence are calculated and reported. This point should be mentioned that, in naming the moves their overall message or the key points with the frequent occurrence was considered as the base. Some moves were repeated through a single section, but they were counted as 1 move.

It should be mentioned here that not all the identified sections are analyzed with regard to their move analysis. The following conditions were observed in omitting PILs section in move analysis:

- PIL section frequency should be above 50%.
- The content should be at least a coherent paragraph having discoursal features.

Regarding these conditions, the sections of “What you should do in the case you miss a dose” and “Effects when treatment is stop” were not analyzed since their frequencies were below 50%. The microstructure of “Packs”, “Manufacturer” and “Date of leaflet revision” sections also was not analyzed as their content does not have discoursal features.

Another issue to mention is that the contents vary across moves. A move may be ranged from a single sentence to several sentences or even several paragraphs. This diversity also can be observed in the same move across different PILs, which may be caused by distinction in drugs properties. The special properties of some drugs demand explication of some information, while its inclusion is not necessary for other products.

In the following part, the identified moves and steps of comprising sections of PILs are presented besides their frequencies and percent.

**Composition Section:**
Move 1: Describing content

Step 1: Giving detailed information about ingredients

**Pharmacodynamics & Pharmacokinetic Properties Section:**

Move 1: Preparatory information on drug composition

Move 2: Informing patients with drug efficiency

Step 1: Describing the effects through statistical measures such as dose and time of effect

**Indications Section:**

Move 1: Describing the medicine use for disease treatment

**Dosage and Administration Section:**

*Move 1:* Expression of warning

*Move 2:* Recommending standard dose and its administration method

  Step 1: Daily use of the medicine

*Move 3:* Recommending dose based on severity of disease and its administration method

  Step 1: Daily use of the medicine

*Move 4:* Recommending dose based on age group and its administration method

  Step 1: Daily use of the medicine

**Contraindications Section:**

Move 1: Indicating ban on use of the drug

  Step 1: Describing cases of contraindication

**Warnings and Precautions for Use Section:**
Move 1: Expressing advice for the drug side effects

Step 1: Specification of dose

Step 2: Recommendation of increase, decrease or discontinuing the drug

Interactions Section:

Move 1: Informing patients of cases of interactions

Step 1: Naming drug with possible side effects

Move 2: Expressing advice for increase/decrease or halting the drug

Side Effects Section:

Move 1: Showing both physical and mental disorders

Step 1: Describing the side effect

Move 2: Classifying side effects into very common, common, and uncommon

Step 1: Describing the side effect

Pregnancy and Lactation Section:

Move 1: Expressing rebuttal of the use of the drug for special period of time

Step 1: Specifying the period of ban

Step 2: Describing the side effects

Move 2: Recommending use of the drug when it is not harmful

Driver and Machine Users Section:
Move 1: Showing the psychophysical effect of the drug
Move 2: Warning patients not to use

**Overdose Section:**

Move 1: Showing overdose symptoms
Move 2: Recommending treatment in case of overdose

**Storage Condition and Shelf Life Section:**

Move 1: Recommending patients of the expiry date
Move 2: Describing physical condition for storing

**Conclusion**

The present study was a genre analysis of PILs. Thirty PILs, written in English, were selected to be analyzed in this study. The researcher analyzed PILs at 2 levels of macro- and microstructure. Results of the analysis at the macrostructure level indicate that approximately PILs are made of 17 sections; however, some variations were also observed. And at the microstructure level, each section has its own move and step framework. The results of genre analysis can be beneficial for those who are engaged in teaching, learning and designing ESP courses, leading to a better quality of the classroom interaction and learning environment (Mirzaee & Hamidi, 2012). Instructors can teach rhetorical structures of informative texts such as PILs and make the learners aware of these text’s rhetorical features.

Furthermore, the material designers can allocate contents in ESP courses to the empirical findings of this study, and present the issue of genre conventions and genre structure in the ESP text for students of medical sciences and reflect the rhetorical aspects of PILs, besides designing appropriate genre consciousness raising activities to make students aware of these generic conventions. It is hoped further researches be conducted on the outcome of the present study to find answers and to raise question in this realm. The possible constraints and limitations of this study are well-acknowledged, further studies should be done to overcome these shortcomings.
References


