MAKING HEALTH COMMUNICATION ACCESSIBLE: A RHETORICAL ANALYSIS OF RADIO HEALTH TALK

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Abstract

If health professionals require that people adopt the healthy behaviours and recommendations that they champion, they must communicate in plain language that people would understand (Koh, 2010). It is against this background that this paper makes an attempt at investigating the accessibility of the vocabulary choices in medical doctors' radio health-talk offered on a local radio station at the University of Cape Coast, Cape Coast, Ghana. Using the theories of genre (Bhatia, 1993; Swales, 1990) and functional systemic grammar (Halliday, 2002; 2000), the paper examines the lexical features of health talk of medical doctors to see the accessibility of the language to the audience. The study reveals a clear attempt by the doctors to use as little technical vocabulary as possible. Out of over 22, 000 words, only about 64 were technical. In almost all the instances of technical vocabulary use, the doctors made attempts at defining or explaining what the terms meant. Among the personal pronouns examined, *you* was the most frequently used (34%), followed by *we* (22.47%) and then *it* (19.47%). The fourth was *they* (14.43%), with the least being *I* (9.70%). These pronouns spread across Moves/Steps within the presentation, with some pronouns occurring in some Moves/Steps more than others. The paper has implications for healthcare delivery and health/medical communication in Ghana and elsewhere.

Keywords: health communication, technical vocabulary, lay vocabulary, personal pronouns

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1. Introduction

There is substantial evidence to suggest that health communication has grown exponentially over the past two and a half decades (Sparks, n.d.), with research in health communication gaining more and more attention among communication professionals. According to Sparks, scholars have discussed the history, future trends, and specific contexts of health communication. He believes that the best way to inform the healthcare and research community is to translate such research efforts into practice "by focusing on real world, significant problems in an effort to reduce the nation's health care burden" (p.5). Further, he thinks that "In an era in which access to health information has a profound effect on longevity, one important health communication research goal … has centered on improving health care provider access to health information, especially in rural, underserved, and minority communities" (p.11).

Thus, there are attempts by health professionals to reach out to people by way of offering them information about their health through radio health talk-shows, particularly in Ghana (Sarfo, 2011). This is important as people often want to hear, know, talk about and discuss their health with competent and caring healthcare providers (Piotrow, Kincad, Rimon & Rinehart (1997). In this attempt at providing healthcare to people, one issue that deserves some level of attention is language use as the nature of language used in such discourses may either promote or hinder understanding. As Morasch (2004) states "While health literacy continues to receive significant attention these days, it is important to recognize that oral communication between doctors and patients can greatly contribute to a patient's understanding of health information" (p.2). Morasch agrees that clear and effective communication remains core in developing meaningful exchanges between doctors and patients.

In a foreword to the *National Action Plan to Improve Health Literacy (2010)*, Koh (2010) contends that "Without clear communication, we cannot expect people to adopt the healthy behaviors and recommendations that we champion" (p.iv). He goes on to say that people are better able to take action to protect and promote their health and wellness when they receive accurate and easy to use information about health. This has become more crucial, especially at a time when there appears to be much more emphasis on preventive rather than curative healthcare (Sarfo, 2011). Thus, in recent times, a number of studies have concentrated on the issue of language use in medical and/or health encounters between health providers and patients/clients.

2. Some Studies on Medical Language

The U.S. Department of Health and Human Services (2005) reports of a mismatch between the health information people receive and what they understand. The report adduces some reasons for the mismatch, viz: the complexity of information presentation, the use of unfamiliar scientific and medical jargon, and the difficulty that people of all literacy levels have understanding information when confronted with their own or a loved one's stressful or unfamiliar situation. Thus, there is a call for the use of 'plain language' to address the needs of those with limited literacy and/or health skills since plain language helps people to understand health information because its writing style is clear, concise, organized and jargon-free.

Morasch (2004) believes that cultural and linguistic differences between physicians and patients are among the barriers of effective conversation and clear communication. According to her, medical jargon can contribute to poor communication as well as enhance it depending on the sophistication of the audience. She thinks that using medical jargons can lead to misinformation and incorrect interpretations that may have adverse effects on a patient's health, adding that "Avoiding medical jargon is essential to ensuring the concise exchange of information between patients and physicians" (p.4). Also, Lê (2006) posits that issues and concepts of health are rooted in culture and so, communication about health needs should take culture into consideration, especially in multilingual discourse settings as actual meaning of words are contextually bound. Lê thinks that as a result of cultural differences, health communication must be done with some caution, especially the type of language we use; otherwise we may misinform the audience. For instance, he states that "inappropriate use of descriptive words about body parts may not cause serious communication breakdown but can cause communication embracement or miscommunication" (p.12).

According to Komen (2007), "One of the most effective and efficient ways to communicate breast health information to undeserved groups … is through carefully developed, culturally relevant, concise and easily understood educational materials" (p.8). She states further that a major consideration for the production of health promotion materials for Hispanic/Latinas is language. She thus, calls for effective, proper and accurate use of the Spanish language in such materials. The production of the materials, she believes, is further complicated by variations in lexicon and idioms that are relevant to Hispanic/Latina groups. She admits that the country of origin and regional locations may contribute to the variations, reinforcing that cultural differences may account for difficulty in understanding health communication.

Černý (2008) asserts that research into the use of medical terminology has received little attention. As a result, he studies some aspects of the use of medical terminology in doctor-patient communication. He finds that at the symmetrical level: Doctors tend to explain the process of examination; they are willing to explain the medical terms used; and patients usually employ medical terminology correctly. However, at the asymmetrical level, doctors initiate the use of medical terms while patients only respond to doctor-initiated questions. Černý says that sometimes when doctors use certain terms, patients may find it difficult to understand.

In a study of the language of internet-based online health advice, Bromme, Jucks, & Wagner (2005) examine how to refer to diabetes. They are of the opinion that establishing a common understanding between health experts and laypersons can be difficult in face-to-face communication. The study further states that if health experts use too much specialist terminology, it leads to lack of common ground and misunderstanding. The availability of paralinguistic modes of communication in face-to-face communication, however, makes it easier to correct such misunderstandings, for example, by nodding, frowning or verbal signals. On the other hand, it is difficult to correct misunderstandings in indirect communication. Thus, the unavailability of natural face-to-face doctor-patient interaction presupposes a careful presentation of radio health talks.

In their study of 'discourse tact' in doctor-patient interactions in South-Western Nigeria, Adegbite & Odebunmi (2006) discuss vocabulary usage in medical communication at three levels. First, they consider six kinds of lexical occurrences – plain words, technical words, proper names, vocatives, deixis, and affirmatives. Second is a discussion of lexical collocation – adjective + noun, verb + noun, verb + adverb. The last level of vocabulary discussion deals with lexical relationships - synonymy (e.g. problem/disease/sickness/illness), antonymy (e.g. sick/well), hyponymy (e.g. disease: cough, malaria, diarrhoea, skin rash). Adegbite & Odebunmi also assess syntactic patterns in relation to sentence types and sentence structure. They also explore cohesion and conclude that cohesion is achieved by referencing (anaphoric and endophoric), lexical cohesion and ellipsis.

Lastly, Sparks(n.d.) shares the view that the area of health communication is now widely recognized as vibrant, theoretically driven, pragmatic, and a key contributor in shaping national health policies. The many opportunities for researchers to address real world health concerns make health communication an exciting area to study. The U.S. Department of Health and Human Services (2000) defines health communication as: "The art and technique of informing, influencing, and motivating the individual, institutional, and public audiences about important health issues" (cited in Sparks, n.d., p.6). Sparks states that the core focus of health

communication has been: message production and processing, and the creation of shared meaning about health issues in relationships. Citing from various sources to support her claims, Sparks opines that communication researchers and professionals address health care issues from a variety of perspectives, among which are: interpersonal and relational issues in provider-patient communication, caring for special populations such as older adults, broader social and community health issues such as prevention, health risk communication and strategic communication approaches, social support and social identity issues, health information sources. Another area that health communication scholars focus on is evaluating the effectiveness of patient-provider interaction and health campaigns since, according to Sparks, health communications interventions must continually be evaluated for effectiveness and adjusted accordingly. This makes the current paper quite a significant one as it adds to studies on health communication evaluations.

Other works by Sparks on health communication include: A patient-centered approach to breaking bad news: Communication guidelines for health care providers (Sparks, Villagran, Parker-Raley, & Cunningham, 2007); Social identity and health: An intergroup communication approach to cancer (Harwood & Sparks, 2003); and Family caregivers' use of humor in conveying information about caring for dependent older adults (Bethea, Travis, & Pecchioni, 2000).

The literature above provides quite a strong background to justify the current study as it is evident that health communication has gained some recognition for some time now, especially in the West, and particularly in America, where health communication research is purported to have generated from (Sparks, n.d). What deserves mention is that, in spite of the attention being paid to health communication in contexts elsewhere around the world, African contexts lack a vigorous research pattern in the area (Adegbite &Odebunmi, 2006; Sarfo, 2011). It is in this context that I consider this paper significant as it adds to existing literature on health communication, using data from a radio source in a Ghanaian context "in order to gain insight into language as an act of social behaviour and action, especially with respect to the institution of medicine" (Adegbite & Odebunmi, 2006, p.499).

3. The Current Study

3.1 Theoretical Approach

In the previous paper to which the current one is a sequel, I used the Genre theory as proposed by Swales (1990) and Bhatia (1993) (see Sarfo, 2011). That paper examined the move/step structure of the health talk-shows. The present paper also does a genre analysis, but with a focus on lexical features as put forward specifically by Bhatia (1993). According to Bhatia a genre analysis considers: Placing the given text in a situational context, surveying existing literature, refining the situational/contextual analysis, selecting corpus, studying the institutional context, and making a linguistic analysis (cited in Pedersen, 2009). This paper is interested in 'making a linguistic analysis', examining specific linguistic features that dominate the data for discussion. The genre theory is supported by the Hallidayan concept of functional systemic linguistics, specifically the interpersonal function of language (see Halliday, 2002; 2000; Halliday & Hasan, 1976), which is interested in the setting-up and maintenance of social relations, indicating the roles played by participants in communication (Feng & Liu, 2010). The interpersonal function of language states that language can be used to influence people's attitudes or behaviour, explain speakers' own attitudes or behaviour, or provide information (Feng & Liu, 2010; Thompson, 2000). Halliday (2009, cited in Feng & Liu, 2010) states that interpersonal meaning can be expressed by pronoun systems. Thus, this study draws on the interpersonal theory to discuss personal pronoun use in the data under reference.

3.2 Methodology

This is a qualitative study, which allows an in-depth description, analysis and interpretation of verbal behaviour in a localised setting (Afful & Tekpetey, 2011). The study is based on a 22, 676 word corpus that was used for a previous study (see Sarfo, 2011), which was an orthographic transcription of audio-taped files collected from Atlantic FM (ATL FM) 100.5, a campus-based radio station at the University of Cape Coast, Cape Coast, Ghana. The station which was established in 1989 (even though its official status as campus-based non-commercial radio was recognised in 1997, and since 2006 has been operating as a community radio station) provides education, entertainment and information to the members of the University of Cape Coast community and its environs. Its main focus is, however, on teaching, learning, research and outreach programmes to enhance the mandate of the University of Cape Coast.

The data were taken from one of the station's educative programmes, named 'Health Talk' which was a weekly programme designed by the station in collaboration with the

University Health Directorate to disseminate information on health issues (especially diseases) to the listening public. The programme aims at educating its listeners on various kinds of diseases, their causes, effects, treatment and prevention (for details of this programme and the Station, see Sarfo, 2011). Five segments were randomly selected from an average of 80 recorded segments, using the theory of saturation in data collection, which states that "The size of the sample is determined by the optimum number necessary to enable valid inferences to be made about the population" (Marshall, 1996:522; Thomson, 2011). Thus, after analysing five randomly selected segments (each of which was about 40 minutes on the average), I observed a clear pattern. The data were then transcribed from audio to text files and coded for easy referencing.

4. Analysis and Discussion

Due to the relationship this paper has with the previous one (Sarfo, 2011), I present the findings of that paper here so that specific references can be made to the relevant parts. That paper found that the presentation given by the medical doctors followed a certain organizational pattern. It contained three moves (with specific steps) (Swales, 1990), namely: (1) Introduction, which had two steps – Opening and Thesis/Previewing; (2) Problem, with four steps - Definition, Epidemiology, Causes/Risk Factors, and Signs and Symptoms; (3) Solution, with two steps - Prevention, Treatment. This move-step pattern is significant for the current paper since the lexical, especially personal pronoun, choices identified in the data seem to have been influenced by the moves and steps.

4.1 Technical-Lay Vocabulary

According to Zethsen & Ashkehave (2006: p.645), "Medical language is traditionally regarded as the language used by medical experts when communicating in an expert-to-expert context. It is the language of the 'specialist,' often defined as a special language as opposed to general language used by the general public in everyday situations …" It usually uses technical language or jargons, usually of Latinate origin (Gotti, 2006) as a result of Latin's position as the former Lingua Franca of medicine, before languages such as English, German and French (Zethsen & Ashkehave, 2006).

However, an examination of the data for this study reveals an attempt by the doctors to use as little technical vocabulary as possible. Out of over 22, 000 words, only about 64 were technical. Examples include chemotherapy, radiotherapy, mammogram, palpation, hormone, oestrogen, progesterone, tumour, retina, opacification, congenital, juvenile, senile, metabolic

causes, trauma, steroids, rubella, hereditary, intraocular pressure, glaucoma, stool, reactionary diarrhoea, gastro-intestinal system, toxins, faeco-oral, protozoa, inflammatory bowel disease, colonic cancer, diverticulitis, antibiotic, abdominal cramps, diagnose, tenesmus, shigella, mass, labour, physiological conditions, abortion, pathology of stress, physiology of stress, sociology of stress, triggers of stress, cognitive filtering, cognitive dissonance.

It is worth noting that in almost all of the instances of technical vocabulary use, the doctors made attempts at defining or explaining what the terms meant (Černý, 2008). Consider the following examples (Note that these examples are unedited; italics and bolding are rather mine.):

1. ... they also give some what we call **chemotherapy**, *that is, the use of drugs to also kill the cancer cells ...*
2. *... Other times too the sheer mass of the breast cancer will have to be reduced, so they do what we call* **radiotherapy** ... some people after surgery also will have to do **radiotherapy** *to still bombard the cancer cells that will be left there ...*
3. *… People going to eat some delicacies that they are not used to and therefore they have something we call* **reactionary diarrhoea** *rather than being caused by a germ ...*
4. But most of these bacteria they are spread through *what err the scientist would* say **faeco-oral**, *that is, through the faeces to the mouth*.
5. When we talk about the infectious one you can have **bacteria** causing; we won't go into the details about what kind of **bacteria** ... we can have **virus** that can cause diarrhoea we can have some **protozoa** also causing. *These are all germs*.
6. ... There are some disease these may be so technical. *There are some diseases that are of the intestines themselves*. Some could be **diverticulitis** ... *there is a condition that we call* **inflammatory bowel disease**. That one the intestines are **chronically inflamed** so they always give the person diarrhoea five to six times diarrhoea.
7. ... Others also cause the diarrhoea as a result of they releasing some **toxins** or *for the lay man maybe poisons ...*
8. *... the one that err the sensation at your anus medically they call it* **tenesmus** *like there is a* **spasm** *at the anus, it wants to come it doesn't want to come*.
9. Err today we are talking of **cataract** and when we talk of cataract first lemme *cataract is a disease of the eye*. *When you look into anybody's eye you see the white part surrounding a central black part. That central black part is actually a whole that is there. It's actually a whole with a lens if you pick a lens like spectacles that people wear there's a lens like that in our eye. Very small and very transparent*.
10. … light is able to pass through and goes to our **retina**, *that is, where images are formed and you can see people and things as they are*.
11. ... we have **metabolic causes**. *When we say metabolic causes err events in our body system and the normal processes of digestion and all that ...*
12. ... and some cataract is **hereditary**. *My grandfather had it my mother had and I am having a cataract. So it is just in the family and its being generously being transmitted*

from one generation to the other and in these err **hereditary cataract** the pattern of the development of the cataract is very similar.

In these examples, the italicised structures explain, either directly or indirectly, the bolded terms. For instance, the italicised structure, *that is, the use of drugs to also kill the cancer cells* ..., explains '**chemotherapy**' in example (1); while *that is, through the faeces to the mouth* explains '**faeco-oral**' in example (4). The same goes for example (2), where '**radiotherapy**' is understood to be a means of reducing the bulk, amount or quantity of something; thus, the lay person understands 'radiotherapy' as a medical process that can be used to reduce the bulk or amount of breast cancer.

In some instances, the doctors employed lexical relationships (Adegbite & Odebunmi, 2006) to explain the terms. Consider example (5): In this example, **bacteria**, **virus** and **protozoa** are mentioned. Knowing that the audience may not be familiar with such names, the doctor says *They are all germs.* 'Germs' is a more familiar and everyday term. The relationship between *germs* on one hand and *bacteria*, *virus* and *protozoa* on the other is a hyponym. A similar example is (6) where the audience are made to see that '**diverticulitis**', '**inflammatory bowel disease**' and '**chronically inflamed**' are problems relating to the intestines. Sometimes, the term was explained by means of a synonym, as in: ... *they releasing some toxins or for the lay man may be poisons* (example 7), where 'toxins' is explained as 'poisons', for the lay person.

One other thing worth mentioning is that, sometimes, the doctors drew the audience's attention to the fact that a certain term mentioned was technical. This was done through such expressions as: ... *what we call* (radiotherapy), ... *something we call* (reactionary diarrhoea), ... *what err the scientist would say* (faeco-oral),... *a condition that we call* (**inflammatory bowel disease),** ... *medically they call it* **(tenesmus)** (see examples 2, 3, 4, 6 and 8 respectively).'*we*' as used here refers to health/medical professionals.

Technical terms occurred mostly within Move 2 (within Definition, Causes/Risk Factors, and Signs and Symptoms) and Move 3 (within Prevention, Treatment). Technical terms did not appear in Move 1 (Introduction) and Epidemiology in Move 2. This is understandable because Introduction and Epidemiology did not form part of the anatomy or detailed analysis of the various diseases/health conditions. This confirms the view that rhetorical choices are usually context-sensitive (Afful, 2010; Bhatia, 1993; Swales, 1990).

4.2 Personal Pronouns

In their real use, pronouns can communicate attitudes and behaviours of people. The meaning and reference of pronouns are usually contextual (Afful, 2010; Chang & Swales, 1999; Ma, 2011). Thus, in this paper, we have tried to identify and discuss the semantic implications of the following personal pronouns (and their variants) and how they affect the message put across by the doctors: I/me, you/your, it/its/it's, we/our/us, they/them.

The semantic implications of pronouns go beyond persons, that is, reference to first, second and third persons. For example, the generic *you* or any of its variants may be used to mean *anyone.* Also, in communication, many people use *you* or any of its variants when they really mean *I* or any of its variants. Again, *they* could be used as an epicene pronoun or as a generic pronoun (Paterson, 2011). Additionally, *we* or any of its variants could be used as a majestic or royal pronoun, where it is used for a person in a high office like a monarch, a bishop or a pope. *We* could also be used as an *editorial we* where the writer casts himself in the role of a spokesman, either for an institution that employs him/her or on behalf of a body of citizens who agree with him/her. Moreover, the *patronizing we* or *all-inclusive we* can be used in addressing instead of *you.* A doctor may use this to give hope to patients or to indicate that he is part of the situation. We shall therefore endeavour to identify how these pronouns were used during the radio health talk-shows.

You represented 34% of pronoun use; it had the highest frequency of occurrence. This is in tandem with Okamura's (2009) finding that *you* was the most frequent of personal pronouns in two types of monologic academic speech, namely, undergraduate lectures and public lectures. In a sentence like *We want all listeners, including **you**, to understand what a cataract is,* one could use the textual and the situational contexts to determine that this *you* referred to the host of the programme. Nonetheless, in most of the sentences that this pronoun was used, the doctors tried to create some sort of face-to-face relationship between themselves and the listening public. They addressed the audience as though they were in face-to-face interactions with them. In these cases, they employed, not the second person singular *you*, but the generic *you*. Examples include:

1. *If **you** are a driver, if **you** are a pilot, without a good sight…*
2. *If **you** look into somebody's eyes **you** see the white part surrounding a central black part.*

The doctors were not referring to the host alone in the two sentences above, but to anyone, any individual listening to the programme. Such use of the pronoun *you* makes the language less formal, as against the more formal pronoun counterpart *one.*

Another pronoun worth mentioning is *We.* It represented 22.42% of the pronouns under consideration. The doctors used the first person plural *we* as they expressed their appreciations to the host and the entire management of ATL FM for the opportunity. For example, ***We*** *are so much grateful for the opportunity like this to use ATL FM.* In addition to this, they used the editorial *we* to help the audience to understand that they were speaking for all the practitioners in the health sector. They cast themselves in the role of spokespersons of the institution that employed them as well as all medical practitioners. Examples are:

13. ***We*** *can put in interventions.*

14. ***We*** *can foresee what will happen in future.*

Also, the doctors used the patronizing or the all-inclusive *we* to make themselves part of the situations and to assure the audience that they (the audience) were not alone. This would in effect give hope to the listening public. Examples include:

15. ***We*** *should endeavour as much as possible not to get eye drops from a chemical shop.*

16. ***We*** *think we are going high, but it is causing stress.*

The third person (plural) personal pronoun, *they,* whose frequency was 14.43%, was also used to convey important senses. In the first sense, it made an anaphoric reference (*Wolf, Gibson* & Desmet, 2004; Halliday & Hassan, 1976) to a singular indefinite pronoun (everyone). In the second sense, it made neither anaphoric nor cataphoric reference. Examples are:

17. We want to use this opportunity to thank <u>everyone</u> for the contribution ***they*** *have made.*

18. ***They*** *put in artificial lens into the eye to correct it.*

In the first example, *they* made an anaphoric reference to the singular pronoun *everyone.* In this case, the individual listener's ability to get it that he/she was being addressed, and not any group of people elsewhere, is very paramount. In the second example, *they* was used technically. When handling some delicate issues, the doctors sometimes distanced themselves from the actions. In this case, any feelings of emotions the issues may evoke were attributed to the medical discourse community.

It represents 19.47% of the pronouns under consideration. In order to avoid unnecessary repetitions, the doctors used *it* and its variants to make anaphoric references to the various diseases/health conditions under discussion. Examples include:

19. *…preventing* ***it*** *from happening at all or catching* ***it*** *early before* ***it*** *causes problem and managing* ***it*** *appropriately.*

20. ***It*** *starts as something, oh ok, things are a bit blurred or something and then it goes and* ***it*** *progresses from one stage of er visual loss to the other, from one stage of visual loss, the person will try to adjust er to try and see very well.*

The *it* in the first example made anaphoric reference to Cancer while that of the second example referred to Cataract. That notwithstanding, the doctors used the *dummy it* where necessary. E. g., ***It*** *is this fear that made us to be coming out to talk and to further coerce people or educate one another as to the need to do some of these things.*

It is no wonder that the least used pronoun was *I*, with a frequency of 9.70%. Ensuring the good health of the citizenry is not an individualistic effort. This is a team work and therefore requires the collective effort of all and sundry in order to make any meaningful impact. A careful look at most of the use of *I* and its variants revealed that they were generic *I*. Consider the examples:

21. *…**my** nipple has this or **I**'ve had eczema around here for a very long time or **I** can feel this swelling here… **I** don't know what it is.*
22. *So we have to take precautions and **I** think that's the main focus of today's presentation.*

These were all the instances of *I* and its variants that occurred under the prevention of cancer. Those in Example 21 did not make specific references; they referred to anyone in that particular situation. It was only the one in Example 22 that made reference to the speaker.

Table 1: Frequency of pronouns

	You	We	It	They	I	Total	%
Cancer	104	55	93	53	20	325	12.61
Cataract	106	66	107	35	107	421	16.33
Diarrhoea	195	220	136	111	28	690	26.76
Stress	416	140	109	71	85	821	31.85
Pneumonia	55	97	57	102	10	321	12.45
Total	876	578	502	372	250	2, 578	
%	34	22.42	19.47	14.43	9.70		100

4.3 Personal Pronouns and Rhetorical Moves/Steps

What is significant and fascinating about the use of the pronouns was their spread across moves/steps within the presentations (Afful, 2011; Bhatia, 1993).

Move 1: Introduction

The most frequent pronoun in this move was *we* (see Table 2). It was used to refer to the presenters. This is understandable because in Opening and Previewing steps, the doctors introduced themselves and told the audience what they were going to discuss, as for example:

23. *... Today **we** actually **we** actually chose diarrhoea because **we** think that **we** should erm address challenging issues that would help **our** clients, **our** people and the whole*

*populace well. And **we** think that with this er topic **we** would er be able to address some...*

24. *... **We** want to look at Pneumonia ... **we** thought it would be good ... to raise the awareness in **our** community. And so that as health workers, as parents, as individuals, as broadcasters **we** shall all join in the campaign to raise the awareness about Pneumonia to reduce the under-five mortality rate. That is why today **we** are specially talking about Pneumonia.*

Move 2: Problem

Step 1: Definition

The pronoun that occurred mostly in this step was *it*. In defining a disease or health condition, reference is normally made to the disease or condition. It is, therefore, not surprising that *it* appeared more than other pronouns in step 1. For example:

25. *Breast cancer is a cancer of the breast. To put **it** ... **it**'s an abnormal harmful growth in the breast and this harmful growth has the propensity or has the ability to move out of the breast to other sites. So this growth will occur in the breast and **it**'s harmful ... **It** will harm the breast. **It** will harm other parts of the body also.*

It is used here anaphorically to refer to breast cancer.

Step 2: Epidemiology

Similarly, *it* appeared more than other pronouns under epidemiology. The reason for the use of *it* in this context is similar to its use under Definition above.

26. *... We want to classify **its** distribution. **It** affects all ages. **It** can be in a day old baby and in a ninety year old grandfather, so **it** cuts through all ages such that if you are born with **it** today then we can describe yours as congenital, that is, you were born with. If **it's** with somebody who is may be about erm three years old or something we can describe it as infantile. If **it**'s in the juvenile somebody about fifteen years old then we describe **it** as juvenile. If **it**'s in somebody who is before about seventy years old we can describe **it** as pre-senile and if **it** is in somebody who is about seventy years old and above then we can describe **it** as senile. So **it** cuts through all ages, but **it** is most seen in those who are aged.*

Step 3: Causes/Risk Factors

The risk factors/causes step usually discussed how people caught diseases/health conditions. In talking about risk factors/causes of diseases/health conditions, the doctors mostly used *you*, and sometimes *we* and, less frequently, *they*. Consider the following expressions:

27. *From age 30 to 75, **your** risk of developing breast cancer is high.*
28. *The more **you** age, the higher **your** risk of developing breast cancer.*

29. *... And another cause is er trauma to the eye ... Something piercing **your** eye when **you** are about five years old and all that and **you** know the eye like any other part of our body **you** will also heal...*
30. ***We** realise just at the face value of it that a lot of it that **we** have are actually due to er er personal hygiene and then even er food poisoning. People going to eat some delicacies that **they** are not used to and therefore **they** have something **we** call reactionary diarrhoea rather than being caused by a germ and **we** think that some of this one **we** should not follow other people who have for luck of a better word cemented tummy who could eat anything.*

In a more strict sense, the pronoun *they* appears more appropriate in this context than *you* and *we* as the audience are supposed be represented as third persons. However, the use of *you* makes the discussion more interactive, bringing the audience and the presenters closer since it makes the audience feel being addressed directly. *One* could have also been used instead of *you* but would have rendered the discussion impersonal, more formal and, thus, create a social distance between the speakers and the audience. The use of all-inclusive *we* is also significant as it puts the doctors in the same situation as the audience. Using mostly *you* and *we* is equally significant as the doctors tried to attribute the causes of the diseases/health conditions to our own actions and inactions.

Step 4: Signs and Symptoms

For this step, the most frequent pronoun was *you,* followed by *it*. The use of mostly *you* reflects the doctors drawing the audience's attention to the signs as symptoms they (the audience) should see if they catch a disease/health condition. Thus, the attention is focused more on the audience (or the patient) instead of the disease itself.

31. *... a painless breast swelling. That's the cardinal presentation of breast cancer. ... other presentations include some eczema around the nipple area ... The nipple instead of showing outward is kind of pulled inside the breast. ... **You** begin to start to have heavy chest ... **you** may also see that one of your breast is becoming bigger than the other. ... Another thing is nipple discharge... If **it** has some stains of blood in **it** when **it**'s getting late the breast starts developing a sore around **it**.*
32. *... The main symptom of cataract is progressive loss of vision, progressive. **It** starts as something oh ok things are a bit blurred or something and then it goes and **it** progresses from one stage of er visual loss to the other form one stage of visual loss the person will try to adjust er to try and see very well....*

The use of *it* is also significant as the discussion in such instances focused more on the disease rather than the audience (or the patient).

Move 3: Solution

Step 1: Prevention

When giving advice in terms of preventive measures, the doctors usually used the all-inclusive *we* and the generic *you* to address the audience.

33. *So **we** have to take precautions ... And if **you** are between 20 from age 20 at least every 3 years once every 3 years **you** have to go to the hospital for breast screening. ... **you**'ll be testing for breast swelling and any other which includes cancer itself. ... And **they**'ll also teach you how to do it yourself ... so that **you** will be able to detect ...*
34. *...err let**'s** let**'s** let**'s** err go for screening. If **you** are told oh go and see the eye specialist here or there so that **they** check **your** eye le**t's** do it ... **We we** should endeavour as much as possible not to get eye drops from a chemical shop and just start putting it on **our** eye because may be **our** eyes are aching or something. For all **you** know these eye drops could contain steroids and we talked that steroids predispose to the development of cataract. ... If **you** have the means **you** can immunise **yourself** against rubella so that **you** are **you** are assured that the children that **you** bear will not have any.*

The use of all-inclusive *we* and *you* indicates that the prevention of diseases/health conditions is a collective responsibility. The doctors, thus, admonished all and sundry to be part of that effort.

Step 2: Treatment.

One fascinating thing is that when the doctors discussed treatment measures, they mostly used either *they* or *we* and their variants to refer to themselves and medical practitioners/health providers in general.

35. *... It is the lens that has to be taken out by a short very short surgical procedure. **They** take out the lens and then either **they** leave it that way or **they** put in another lens. **They** put in an artificial lens into the eye to correct it or **they** will give a spectacle or spectacles to correct the effect...*
36. *There are various modes of treatment. One of them is surgery. ... **They** also give some what you call chemotherapy. Other times too ... **they** do what we call radiotherapy...*
37. *... By the time they come **we** remove the breast like **we** are removing hernias almost all the time **we** are just clearing people's breasts.*

In these examples, *they* and *we* refer to medical doctors, who perform the surgical operation to correct the eye defect. In most cases, by using *they*, the doctors (the presenters) distanced themselves from the act of treatment, while *we* made them part.

Step **: Demystification/Misconception

In this Step, the pronouns *it* and *they*, were most frequent, followed by *you*. *It* was usually used to refer to the disease/health condition in question, while *they* was used to refer to the patients/audience who had some misconceptions about the disease/health conditions under discussion. Consider the following examples:

38. *… for the concern about seeking medical care, it's not actually getting the diagnosis for most of the women **we** don't have a problem **they** are coming but then when **they** see small thing **they** come. But it's the modality of treatment that **they** don't **they** haven't come to terms with or **they**. So we are using this forum to actually let **them** know that there are people who are top level executives who are presidents who are big time who have one breast or no breast at all. ... and **they** are living more resourceful lives.*
39. *… Know that in the various communities, there are people who say **they** can push the eye ... **They** look at the eye and put some instrument to grab the dark the white lens out. At the end of **it** all **you** see the whole eye leaking liquid and then **it** collapses ... That **they** will operate and people could go with about ten years of impaired vision and that in 2-3 days **they** could see clearly and what a reincarnation*

The use of *they* in this context is quite significant as it allowed the doctors to distance themselves from such misconceptions, meaning they did not accept those misconceptions.

Table 2: Personal Pronoun use across Moves/Steps

Moves/Steps		You	We	It	They	I	Total/%
Move 1:Inroduction							
Step 1:Opening	Can	-	10	1	1	1	13
	Cat	-	5	-	-	-	5
	Dia	0	8	5	0	0	13
	Str	14	9	2	1	1	27
	Pne	0	2	0	0	0	2
Step 2: Thesis/Previewing	Can	3	14	7	-	-	24
	Cat	7	15	-	-	-	22
	Dia	10	18	12	1	2	43
	Str	106	55	29	28	20	238
	Pne	0	2	0	0	0	2
Move 2: The Problem							
Step 1: Definition	Can	-	2	6	-	-	8
	Cat	11	10	28	5	-	54
	Dia	10	2	14	5	0	31
	Str	13	7	7	6	5	38
	Pne	1	2	6	0	0	9
Step 2: Epidemiology	Can	2	-	3	1	1	7
	Cat	10	10	19	-	-	39
	Dia	18	25	13	3	1	60
	Str	-	-	-	-	-	-
	Pne	2	10	9	15	0	36
Step 3: Causes/R. Factors	Can	38	4	2	5	4	53
	Cat	14	20	27	14	6	81
	Dia	32	68	32	51	6	189
	Str	127	42	41	32	18	260
	Pne	15	13	10	34	6	78
Step 4: Signs/Symptoms	Can	17	5	27	3	4	56
	Cat	8	-	9	4	-	21

	Dia	32	14	20	14	5	85
	Str	7	2	1	11	2	23
	Pne	3	0	4	5	0	12
Move 3: Solution							
Step 1: Prevention	Can	15	12	7	13	4	51
	Ctr	38	22	22	5	8	95
	Dia	70	59	34	29	7	199
	Str	44	7	18	1	13	83
	Pne	8	43	9	63	11	134
Step 2: Treatment	Can	15	3	25	15	1	59
	Cat	36	11	18	14	-	79
	Dia	23	26	6	8	7	70
	Str	81	20	22	3	26	152
	Pne	15	8	8	13	1	45
Step **: Demystification	Can	14	5	15	15	5	54
	Cat	6	-	7	11	1	25
	Dia	-	-	-	-	-	-
	Str	-	-	-	-	-	-
	Pne	-	-	-	3	-	3
Total		876	578	502	372	250	2,578

Key: Can –cancer; Cat- Cataract; Dia- Diarrhoea; Str- Stress; Pne- Pneumonia

5. Conclusion

This paper (which is a sequel to Sarfo, 2011) attempted to investigate how medical doctors tried to make their language accessible to the audience during radio health talk-shows on a local radio station, ATL FM 100.5, University of Cape Coast, Ghana. The paper employed Swales' (1990) and Bhatia's (1993) rhetorical analytical theory as well as the Hallidayan concept of functional systemic linguistics, specifically, the interpersonal function of language (see Halliday, 2002; 2000; Halliday & Hasan, 1976), to examine technical-lay vocabulary and personal pronoun use in the language of the medical doctors.

The study reveals a clear attempt by the doctors to use as little technical vocabulary as possible. Out of over 22, 000 words, only about 64 were technical. In almost all the instances of technical vocabulary use, the doctors tried to define or explain what the terms meant. The relatively few technical terms occurred mostly within Move 2 (Definition, Causes/Risk Factors, and Signs and Symptoms) and Move 3 (within Prevention, Treatment). Technical terms did not appear in Move 1 (Introduction) and Epidemiology in Move 2. This confirms the view that rhetorical choices are usually context-sensitive (Afful, 2010; Bhatia, 1993; Swales, 1990).

Among the personal pronouns examined, *you* was the most frequently used (34%), followed by *we* (22.47%) and then *it* (19.47%). The fourth was *they* (14.43%), with the least being *I* (9.70%). These pronouns spread across Moves/Steps within the presentation, with some

pronouns occurring in some Moves/Steps more than others. For example, in Move 1 (Introduction), the most frequent pronoun used was *we*. In Move 2 (The Problem), *it* was the most frequent in the Definition and Epidemiology steps. In Step 3 (Causes/Risk Factors), the doctors mostly used *you*, and sometimes *we* and, less frequently, *they*. For Step 4 (Signs and Symptoms), the most frequent pronoun was *you* followed by *it*. In Move 3 (Solution), Step 1 (Prevention) saw the use of mostly the all-inclusive *we* and the generic *you*; while Step 2 (Treatment) involved mostly the use of *they* and *we* to refer to medical/health professionals.

One other thing worth mentioning is personal pronoun use in terms of their referents (Halliday, 2009). When reference was to the disease/health condition under discussion, *it* was mostly used, and when reference was to the audience, *you* was mostly used, followed by *we*. On the other hand, when the doctors referred to medical doctors/health professionals, they used mostly *we*, followed by *they*.

Some implications can be drawn from this study. It reinforces the idea that language use or vocabulary choices are contextually bound (Lê, 2006; Bhatia, 1993). The study has shown that the use of personal pronouns for specific referents as well as other vocabulary choices depends on the context within which they are used; personal pronouns have multiple functions. In other words, context influences our vocabulary choices. It also confirms that rhetorical structures (Moves/Steps) affect language choices (Afful, 2010; Bhatia, 1993; Swales, 1990).

The findings of the study suggest that, to some extent, medical/health professionals are making the effort to make medical language accessible to the lay person (Černý, 2008; Morasch, 2004). This is an important way of helping the public have access to quality information about their health in order to engender longevity of life (Piotrow, Kincad, Rimon& Rinehart, 1997; Sparks, n.d). This is significant for the current emphasis on preventive rather than curative healthcare in Ghana and elsewhere (Sarfo, 2011).

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