Bridging Understanding in Medicare: Template for Effective Communication in Indigenous Languages
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Abstract
The maintenance of a good patient-doctor relationship, otherwise known as clinical relationship, is central to health care delivery in medical practice. For this reason, the usual practice in medical schools all over the world is to make the attainment of communication skills compulsory for all. A doctor’s good communication skills, therefore, are a function of the medical vocabulary with which he communicates with his patients. It has been observed that doctors in many African societies, especially in Yorubaland, have mostly conveyed their ideas in medical jargons using the English language, and this inevitably breaches clinical relationships. This article seeks to address the issue by proposing a template for the conveyance of medical terms, in respect of consultation procedures and directional information labels in the hospital environment, in the Yoruba language as a medium of clinical communication. Appealing to concepts embedded in the theory of lexical morphology, this article demonstrates how word formation processes can be used to achieve a Yoruba language template for medical terminologies.

Introduction
The need to foster purposeful and effective healthcare delivery is basic to medical practice. Attainment of this is linked to a considerable knowledge of medicine as an academic discipline and the ability to ensure that the knowledge is used for the benefit of humanmankind. The former is attainable in medical school but application of this knowledge can only be enhanced if medical curriculum considers the importance of communication between the doctor and the patient. This calls for synergy of medical knowledge and communicative skills, since healthcare delivery can only serve its purpose if a doctor fully comprehends the feelings of his patient. It has been observed that in most African counties, colonial languages such as English, French, Portuguese and Spanish are mostly used as the means of communication between doctors and patients. In Nigeria, healthcare delivery is done mainly in the English language, even when doctors practise in the rural areas where majority of the people live and where the medical needs are somewhat complex as a result of environmental hazards. The most practical way to communicate has been through interpreters. It is regrettable that this observation is common with doctors who share the same indigenous languages with their patients. It thus appears that their medical training has obliterated their competence in their indigenous languages such that patients are hardly comfortable with them during consultations.

This article examines this distressing situation by proposing the inclusion of communication in the indigenous languages in the medical curriculum as a long-term solution. In specific terms, it proposes the immediate solution of opening a window for effective communication in the Yorùbá language for consultation procedures and directional information labels in the hospital environment. The central argument is that diagnoses may not be appropriate if the patient’s feelings are not perfectly understood by the doctor. The present situation may be achieving some results in the urban areas where patients have considerable competence in the English language, but the majority of
patients in the rural areas are definitely not getting the best of modern medical practice. Perhaps, this explains why rural dwellers still have more faith in traditional medical solutions to their health problems.

The problem of disharmony between contemporary medical education and African indigenous languages was captured in an editorial of the Sun newspaper in what Owolabi (2006:17) has rightly called Native Language Prejudice Syndrome (NALPS henceforth): If anything, our local languages are constrained in a number of ways. Most of them are not developed enough to accommodate the intricacies and inflections that a dynamic language should have. New ways of doing things especially in the areas of science and technology as well as information technology can hardly be captured by the lexis and structure of our indigenous languages (March 28, 2004, p2).

This article addresses the prejudice by aligning with previous efforts to correct the situation.

**Theoretical Framework**

Our analysis will greatly benefit from the Lexicalist Theory of Generative Morphology, which is an advancement on the treatment of lexical items in Generative Grammar and Generative Semantics. The theory has two approaches to the study of words and the nature of the lexicon. One of the approaches, which is referred to as lax, allows “syntactic derivation of some words but also agrees to the fact that the lexicon contains idiosyncratic and unpredictable items” (Yusuff 2008:19). The proponents of this approach are Baker (1988) and Lieber (1992). The second approach, which is labeled strict, does not allow transformational approach or syntactic solution to the nature of the word. It assumes that all words are lexically derived. This approach is traceable to Chomsky (1970), Selkirk (1982), Di Sciullo and Williams (1987), among others. We find the lax version suitable to the analysis of our data.

**Data for Study**

The main motivation for this choice of data sources is the observation that medical terms need to be reduced to indigenous languages. We intend to exemplify with the Yorùbá language. Our data were collected in English from the staff of University of Lagos Medical Centre. The data in respect of the empowerment of Yorùbá to capture contemporary medical notions and ideas were sourced from recorded Yorùbá music, contemporary literary works, and researchers’ introspection as native speakers and collections of scientific and technical terms.

**The Yoruba Language**

Yoruba is one of the three major languages of Nigeria; the other two are Hausa and Igbo. As expressed in Fakoya (2008), the Yorùbá language is spoken as a first language by more than 22 million people spanning the south-western parts of Nigeria, the neighboring countries of the Republic of Benin and Togo and even outside the shores of Nigeria. The oral literature of the Yorùbá race also has a trace in the cultures of countries like Brazil, Cuba and parts of the West Indies, Trinidad and Tobago as a result of the descendants of the Yorùbá now domiciled in those countries. Yorùbá is spoken extensively in Nigeria in Lagos, Ondó, Ògún, Èkití, Òyó and Òṣùn States as well as in parts of Kwará, Kogi and Edo States. The speakers are contiguously located in south-west Nigeria (Adétugbó 1967 and Adeniyi 2005).

**Previous Efforts to Develop the Yoruba Language**

Deliberate efforts to develop the Yorùbá language can be said to be in two categories, namely: documented and undocumented. The documented are published works as listed below:
The undocumented category centres on the promotion that the Language has enjoyed from the media. The media is an important source of language engineering. This is because the media shapes the idea of anything conceived by the people. Adeniyi and Bello (2006:154) argue that the media is a fast means by which one could get anything promoted. This however does not sidestep the deliberate language development activities of any nation. Apart from the media, Yorùbá language has witnessed resourceful development over the years through the retinue of oral literature passed down from the rich historical past.

**Strategies**

In response to NALPS, aside from the existing words in Yorùbá language whose meanings could be directly used, some meanings could be extended and various strategies such as compounding, coinage, reduplication, slang and borrowing - though as a last resort - could be applied to formulate terms for expression of contemporary ideas and notions in any fields of human endeavour. Some examples of the strategies are discussed below.

- **Compounding**

  Compounding is the process of putting words together to build a new one that does not connote two senses, but one and that is pronounced as one unit. Words that come together in this form are mostly nouns or nominals as well as other major lexical categories (Wisnicwski 2007, Yusuff 2008). Examples of this in Yorùbá are:
  
  i. Certificate - *iwe* *eeri* (*lit. book evidence*) = *iweerei*
  
  ii. *Ascariis* – *arannin* (*lit. worm inside*) = *arannannu*
  
  iii. *Radiate* – *fe kà* (*lit. blow around*) = *feke*

- **Reduplication**

  Reduplication is described as a morphological process whereby a copy of a morpheme (free or bound), in either slightly altered or identical form, is added to the form in order to produce a new word possessing a syntagmatic relationship with the base/original word (Awoyale 1989). Examples of this in Yorùbá are:
  
  i. Monthly – *oṣu + oṣu* (month + month) = *oṣoṣoṣu*
  
  ii. *Prostitute* – *dó ṣọ* + *dó ṣọ* (copulate husband + copulate husband) = *dókódoκó*
  
  iii. Chapter by chapter/in chapters – *ori + orí* (chapter + chapter) = *ороори*

- **Coinage**

  This is a process of word formation which takes cognizance of only the description of some aspects of an item in finding a name for it. In the words of Delahunty and Garvey (2010), “coining is the creation of new words without reference to the existing morphological resources of the language”. Words in this process can be derived from the description of the appearance and sound of the item. It is employed in the Yorùbá language in the following examples:
  
  i. *Omnipresent* - *A tẹ̀ rẹ̀ rẹ̀ kà aye* (*lit. one who spreads upon the earth*) = *Ateerrerekayé*
ii. Omniscient – A rí inú rí òde (lit. one who sees both in and out) = Arínúròde
iii. Bicycle – kẹkẹ (coined from the way it sounds when riding on it) = kẹkẹ

- **Slang**
  Ali *et al.* (1993) define slang as an appreciation whose use serves to mark the user as belonging to some distinct group within the society. Therefore, people who belong to more than one of such groups may use very different slang depending on who they are communicating with. The Yorùbá examples for slang are:
  i. Chilled (drink) - șe èwọn [lit. be imprisoned (like a soft drink in a fridge)] = șewọn
  ii. Slim – lè pa (lit. very flat) = lèpa
  iii. Defraud – gbá, (lit. to sweep (verb transitive)) =gbá

- **Borrowing**
  This is a process of borrowing words from other languages. As resourceful as Yorùbá is, borrowing is often allowed in the language but it is usually employed as a derivational process of last resort. It is highly imperative to mention here, however, that all borrowed words must duly satisfy the phonological conditions of the language before they are used. Examples are:
  i. Machine – máṣíini (from English)
  ii. Fenêtre – ‘window’ – fèrèṣè (from French)
  iii. As-salat – ‘worship’ – Asàlàtù (from Arabic)

- **Folk Etymology**
  This is a form of derivation where the form of a word changes in order for it to better correspond to its popular and new realisation. According to Poruciuc (1991), this typically happens when a change in the meaning of a word occurs resulting from an incorrect popular notion of the origin or meaning of the term. Some Yorùbá examples are:
  i. Volkswagon – ijàpá ‘tortoise’ (similarity in shapes)
  ii. Mercedes Benz – Òbòkùn ‘robust expensive fish’ (similarity in shape and cost)

**Application to Terms in Medical Consultation**

Our major concern in this paper is to proffer a solution to the problem of communication in healthcare delivery in the short run. In achieving this, we will look at terms as they relate to the minimal consultation procedures and labeling of sections in the hospital in the Yorùbá Language.

**a. Procedures**

From our interview, we observed that medical consultation starts from registration. This leads to documentation and vital signs such as measurement of blood pressure, temperature and pulse. After this, a patient is referred to a doctor for consultation. During consultation, dialogue will ensue between the doctor and the patient. Such dialogue will centre on drawing of information on likely symptoms from the patients. On retrieval of information from the patient, the doctor prescribes drugs, injections or further tests to the patient. A patient could be asked to take injections, drugs or both at this point.

For the purpose of analysis, we intend to formulate words for the following key terms observable in the process.

i. **Registration** – iforúkọsilè: ì+fí+orúkọ+sílè - the act of putting name down.
ii. **Vital signs** – iyèrawò: ì+yè+ara wò - the act of examining the body (self).
iii. **Blood Pressure** – ìfúnpá: ì+fún+apá - the act of squeeasing the arm.
iv. **Temperature** – ìgbònà ara: ì+gbònà+ara - gauging of hotness of the body.
v. **Consultation** – yènwò: In Yoruba traditional society, this word is used for consulting the Ifá priest whenever they have challenges relating to health and
spiritual matters. Yẹ́̀wò is derived from yè ̀mí wò which literally means ‘cross-check me’. This term is drawn from folk etymology subjected to semantic extension.

vi. **Prescription** – Àkọfálásàn: This literally means “that which is written for the patient”.

vii. **Drugs** – ẹgbò ịgí (lit. root of tree): This is used to mean tangible medicine among the Yorùbá. Ọ̀gún (medicine) is not appropriate for drugs because the meaning includes both tangible and intangible medicines among the Yorùbá people. Intangible medicine includes incisions, amulets and even verbal charms.

viii. **Injection** – abèrè (lit. needle): This is already commonly used in hospitals but it is also used to describe ‘syringe’ and ‘injectible drugs’. In this connection, witness the term réléwéé “railway,” which refers to ‘train’ itself in Yorùbá and not the ‘track’. *Track*, however, is called ọjú-irin, “the eye of iron”. This underscores the importance of folk etymology in the formulation of terms. The word abèrè is already in existence in the language, meaning ‘needle’. It therefore refers to injection by semantic extension. Consider abèrè ̀ajèṣàra (immunisation/vaccination) which refers to injection for boosting body immunity. This also refers to oral vaccination in the language.

ix. **Medical test** – Ìyèwò: This is formed through the process of composition. Ìyèwò means the process of cross-checking. We can now easily derive various forms of tests as follows:

x. **Urinalysis** – Ìyètòwò - “act of cross-checking urine”

xi. **Stool test** – Ìyègbèwò - “act of cross-checking stool”

xii. **Blood test** – Ìyèjèwò - “act of cross-checking blood”

xiii. **X-ray** – Ìyàgòàrawò (i-ye ̀àgò ara wò) “act of cross-checking internal organs.”

Let us at this juncture consider **scanning** which even though may be covered by iyàgòàrawò but may be differentiated by suggesting iyàwòjànà (immunisation/vaccination) which refers to injection for boosting body immunity. This also refers to oral vaccination in the language.

xiv. **Test result** – Èsì/Àbájádè iyèwò.

**Directional Information Labels (àmí itònísíồnà)**

The need to formulate terms for directional information labels in the hospital environment cannot be overemphasised. Even though consultation procedure terms earlier discussed improve the communication process verbally, labels will increase the effectiveness of healthcare delivery if the needs of patients that are literate in the Yorùbá language are provided for. It is interesting to note that there are numerous Yorùbá speakers, who through adult education (that have been institutionalised since the western region times), have acquired literacy in the Yorùbá language. Let us consider the following:

i. **Outpatient department** – Èka ìgbàwòsàn ọ̀kákò

ii. **Inpatient department** – Èka ìgbàwòsàn àdánídúró

iii. **Registration centre** – Êbùdò ifòrùkọsìlè

iv. **Emergency** – Êwòsan pàjàiwiri

v. **Pharmacy** – Yàrà ẹgbòógi

vi. **Consulting room** – Yàrà yẹ̀nwò

vii. **Pharmacy store** – Yàrà itọjú ẹgbòógi

viii. **Laboratory** – Êbùdò iyèwò

ix. **Injection room** – Yàrà ̀jìṣì\(\)èrè

x. **Dressing room** – Yàrà iwegbò

**Conclusion and Recommendations**
This paper has attempted to provide a pragmatic solution to the problem of doctor-patient communication in indigenous languages using Yorùbá as illustration, with a view to enhancing considerable delivery of sustainable healthcare to the greatest number of people, especially among the rural dwellers who are not literate in English or other foreign languages. The training of doctors should pay more attention to effective communication in the language(s) of the patient. To achieve this, in this paper we have formulated terms in the Yorùbá language for sample English medical related words as are relevant to basic consultation procedures and directional information labels at medical centres. In doing this; we have used the theory of lexical morphology and have highlighted similar efforts in terminology formulation. Also, strategies that could serve as a template for the formulation of other medical terms have been provided. We believe our analysis has provided the enabling capacity to at least improve patient-doctor communication if only as a first-aid solution.

To have a Yorùbá comprehensive medical terminology for long term use, we will need to have workshops comprising linguists and experts of various specialisations in medical education. We recommend a joint proposal for series of workshops for the realisation of this comprehensive project. In addition, compulsory Yorùbá courses should be included in the curriculum of medical students. If French is made compulsory for science students at the University of Lagos presently, we cannot argue against recommending Yorùbá language as a compulsory course in south-west Nigeria, Igbo in the east and Hausa in the northern part of the country for medical students. After all, Nigerians have been going to different countries of the world where they learn the language of the land before they study their major courses even up to Ph.D. level.

We are not advocating for total breakaway from the use of English in our curriculum for now, but are only trying to show that it is possible to be properly educated in African languages in general and yet remain relevant in the affairs of the world and indeed in globalisation as it is conceived in modern times. We are well aware of other nationals like Chinese, Japanese and Germans who can hardly speak English but are involved in major infrastructural development activities in Nigeria and indeed the whole of Africa. Examples are CCECC (China Civil Engineering Construction Corporation), Julius Berger (Germany), and Solel Boneh (Israel) which are common sights in this country. Their engineers and technicians are trained in their countries and in their languages. This shows that knowledge can only be maximally useful to people when they are transferred in their mother tongues. Also, we can only be creative with knowledge when they are immersed in indigenous cultures. The common and erroneous restraint of children from using their mother tongues is not only dangerous to the development of our nation but it is also a suicidal impediment to genuine emancipation. For sure, Technology can never be transferred for the benefit of a people if it is not soaked in the dye of an indigenous culture.

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