

Review

Studies in medical terminology: a bilingual glossary of thirty terms in epidemiology (English-Igbo)

IWUNZE Emeka Innocent^{1*}, CHUKWU Helen² and NZENWA Chinwe Ngozi³

Accepted 13 May, 2015



As the menace of diseases assume an epidemic magnitude, efforts in medical science and related services are needfully reviewed, doubled and intensified. A greater percentage of the African population have no access to breakthroughs in medicine and healthcare delivery in critical situations, because information and instructions related to these are expressed in languages foreign to them. The onus and relevance of language studies and services will not be better appreciated at any other time than now that the world, nay the black race is faced with the fatal outlook of the menace of HIV/AIDS, Ebola Virus Disease and other emerging epidemics. The thrust of this paper- a bilingual glossary of thirty terms in epidemiology, demonstrates the skill of bridging language-(terminology) related barriers to global efforts at eradicating, coping or dealing with the menace of epidemics.

Key words: Medical terminology, language, epidemiology, healthcare delivery.

¹Department of Foreign Language and Translation Studies, Abia State University, Uturu, Nigeria.

²Department of Linguistics, Communication and Igbo Studies, Abia State University, Uturu, Nigeria.

³Department of Foreign Languages and Literatures, University of Port Harcourt, Port Harcourt, Nigeria.

*Corresponding author. E-mail: docemeka2010@gmail.com, Tel.: 0816257931

INTRODUCTION

There has been a paucity of terms (words or expressions) in languages of limited diffusion, like Igbo and many other African languages, to match those of languages of international reach, like English and French, with particular reference to the health sector. This has been a major hinderance to global efforts to eradicate, control or cope with some epidemics.

Health and safety guidelines in such critical situations are more often expressed in European languages, foreign to the masses- the illiterate African population. Attempts to transfer the inherent messages in sensitization campaigns into African languages, through interpreting, translation and mass media airtimes, as is often the case, have often been hindered by insufficiency of equivalent terms (health-related) in the target languages. The tendency has been for the emergency interpreters and translators to hurriedly create equivalent terms, without recourse to professional guidelines- to achieve the intended messages. Such equivalents are defective, and as such, fail to effectively convey the conceptual message inherent in the original terms to the target language audience.

A good number of diseases have their natural

equivalent names in languages authentically African, which are often derived from or explicative of the symptoms and dangers of such diseases. However, emerging epidemics across the globe are as foreign to the African people, culture and climate, as their symptoms, causes and other related features. Inability of the illiterate masses to understand and follow information and guidelines related to these epidemics- names, causes, symptoms, prevention, treatment, control, care for patients, etc, stems partially from lack of terms in African native languages corresponding to those in the source languages, as inherent in the messages. This trend has had fatal effects on the people.

The foregoing justifies the measure of immediacy associated with the onus of researches in Igbo medical/health terminology by language engineers of African origin, especially Nigérians.

Purpose of the study

This research is thus aimed at provoking and guiding further and even greater attempts at assembling,

reviewing and creating equivalent medical or health-related terms in Igbo as a target language, with particular emphasis on epidemics, to those of languages of wider or international diffusion, to wit: controlling, coping or dealing with the menace of epidemics, albeit regularly.

Scope of the study

The limits of a paper volume in a journal context in time and space constrains us to accommodate in the glossary only technical words or expressions (Terms) related to the subject of "Epidemics", and precisely their names, as only an objectively selected aspect of terminology of "Epidemiology".

Significance of the study

As already implied, the value of the product of this study is in its estimated capacity to provoke a pull of intellectual resources into Igbo medical/Health Terminology, in the bid to demonstrate a form of quick response to the need for a people-oriented engineering in Nigerian (African) languages, if only to match English, French and other modern European languages in the terminology of the life-saving field.

A DEFINITIVE FRAMEWORK OF TOPICAL CONCEPTS

It is imperative to base our discourse on a definitive conceptual framework in relation to the two key terms in our main title, viz: Medical Terminology and Epidemiology.

Medical terminology

This compound noun is made up of the adjective "Medical" (Relating to Medicine and the treatment of Disease or Injury) and the noun "Terminology" (The technical words or expressions that are used in a particular subject (Bullon et al., 2007). Medical Terminology thus refers to the technical words or expressions that are used in the field of Medicine, being the study and treatment of illness and injuries.

Epidemiology

This simply refers to the study of the way diseases spread and how to control them.

REVIEW OF RELATED LITERATURE

This discourse will no doubt be unweighty without a

glance at existing theoretical reflexions, in terms of literature related to issues in the object of our research- the need for information in the health sector and language obstacles to effective information dissemination therein, on one hand, and an appraisal of Igbo medical terminology, on the other hand.

Information in the health sector and language challenges

Challenges to health care delivery and education are enormous. One major obstacle to attempts at globalizing effective information and Education in the health sector in relation to disease control, prevention, diagnosis, treatment, care for patients, etc, has been the deficiencies of the masses, the illiterate population, in the languages of international diffusion, in which such messages are relayed. Most people in African countries, have speech and writing challenges in European and other foreign languages, due mainly to illiteracy. Inadequate usage of African languages in the health sector hinders the access of the masses to information of great health value, and results in increase in mortality rates. In the same vein, foreigners deficient in African languages have not benefitted sufficiently from breakthroughs in alternative medicine by Africans, due to communication (language) barriers.

Where health services are accessible, they may be unacceptable for patients because of the inability of staff to communicate with those who are fluent in English. Any effective message or information in the health sector must have the following attributes:

- (a) The receiver must be able to understand the message.
- (b) The receiver must be capable of doing what is asked with the least amount of effort (Iwunze and Coockey, 2007; quoting Ross and Mico, 1980).

Igbo medical terminology: an appraisal

A discourse on the onus, problems and prospects of Igbo medical terminology is intended at reflecting the state of the art on Igbo terminology of all other fields of human endeavour. It goes without saying though that language in general and information in the Health sector in particular are as important to mankind as water is to fish, health being the key indicator of development across nations of the world.

It is obvious that Igbo and many other African languages do not have as equal reach with vocabularies/terms (words or expressions) of medicine and virtually every other field of human endeavour, as modern European languages. Most of the epidemics currently scourging the black race in particular and the

world in général, have no names in Igbo. The tendency has often been to have undue recourse to borrowing of the foreign names into Igbo, creating pronunciation and like expressive difficulties for the illiterate population thereby, in their quest for medical attention in orthodox circles. Most terms created in the language to fill the lacuna are worst still semantically and culturally abusive and invalid, having been hurriedly created, without respecting the natural (Peculiar) usage of the target language. A term like Acquired Immune Deficiency Syndrome (AIDS), for instance, currently has as Igbo equivalent "Oria obirinajaocha" (A disease that must drag its sufferer to the grave). This Igbo equivalent of the English term owes its birth to overzealous Igbo mass media practitioners, whose use of Igbo in media activities leave much to be desired of the vocabulary status of the language. The basis for the coinage "Obirinajaocha" is the fact that, presently, AIDS has no (known) cure, but many other diseases are in the same category. Besides, one wonders what would happen to the term, if tomorrow a cure is found for or a vaccine is developed against AIDS. A term like that needs to be urgently revisited, *vis-a-vis* professional ethical guidelines for term creation. The case for borrowing and naturalisation of foreign terms into a target language can only hold when equivalents cannot be found or created in the language, given its cultural background. Term creation in Igbo faces a great deal of challenges, as captured in Nwanjoku (1998) thus:

It is no longer in doubt that frantic efforts including researches are being made by specialists to create and standardize terms in Igbo language. With emphasis on the teaching of Igbo language in our primary and secondary schools, teachers and language experts have done a lot to improve the language. Apart from teachers, traditionalists, lovers of Igbo language, translators, linguists and media practitioners are also involved....., despite propositions, researches, seminars, conferences and journals which abound, the situation has not changed much.

The Igbo language situation can be described as follows:

- 1 Most research findings in Igbo terminology by experts and teachers are not accepted.
2. There is a big gap between the researchers and the policy making bodies of the language.
3. There are not enough and proper avenues to disseminate findings.
4. New words are created indiscriminately without following the correct method of terminological research.

It remains worrisome that most researches in Igbo terminology are neither well sought out by the relevant agencies of education that need them, nor easily available to them, due mainly to the fact that those researches were either done for the acquisition of higher degrees or for advancement from one grade of job to the other (Ajayi, 1985). Nwanjoku further observes that most

of these researches are wasting in libraries and departments where they were carried out. Language with its related sciences and services is one of the indispensable communication tools common to all human societies.

Other sensitive issues related to epidemics- causes, symptoms, prevention, treatment, etc. have been objects of researches published in languages and media-internet, newspapers and magazines foreign and inaccessible to the illiterate Igbo population.

CONTROL, METHODOLOGY AND PROBLEMS

Control

The present undertaking to:

- (a) Find and assemble Igbo equivalents of English terms in medicine, with particular emphasis on epidemiology, and even epidemics.
- (b) Give names to such terms where they have no equivalents in Igbo.
- (c) Harmonize the terms, particularly names of products and services in various aspects of the field of medicine in Igbo, with our present focus as a pilot study.

may not have been sponsored by the government, individuals, corporate bodies or non governmental organisations interested in terminology of medicine and health education or known to be involved in the struggle to control or eradicate the menace of epidemics, to whom the need of its product may seem most urgent, but rather premised on our personal concern with the need to enrich our native language vocabulary relative to the life-threatening subject- "Epidemics", it does not promise any final word on the matter in particular, or on Igbo medical terminology in general. The product is thus subject to critical review by language policy making institutions in Nigeria and Professional/Learned Associations relative to the subjects.

Methodology

Terminology practice involves concept definition (including illustration of concept) and assignment of 'appropriate terms' to defined concepts. Such definitions are done across modern languages in two stages- placing the concept within a category of concepts and identifying what distinguishes the concept from other concepts within the category. This implies looking for two kinds of features in a given concept - categorical features and distinctive features, in our attempt to assign appropriate names in the target language to defined concepts in the source language (English), where applicable. As attested to in Anyaehie (1997), the corpus

of terms in operation herein is built from relevant manuals, catalogues, product information brochures, journals and direct consultation of domain experts and specialized dictionaries, to guide our general understanding of the terms and their assigned definitions in English, as relied upon. Terminology can be approached through different ways, but since a term is a cognitive tool that enables one to understand a concept, whichever way is adopted, it should be both transparent and specific. Some of the sampled terms have existing equivalents in common use in the target language. These are reviewed and either retained or modified to yield to experts' methodological considerations or guidelines on Terminology. Where such creations were inevitable, Dubuc's (1978) approach of semantic extension by analogy of form or function has been predominantly adopted. We also had cases of Naturalization; an umbrella term for coining an indigeneous term out of a foreign term, by pronouncing the foreign language's phonetic system and adopting the target language's orthography in writing the term (Ezuko, 1998).

Generally, five approaches have been adopted in the glossary, viz:

1. Equivalent (The natural meaning given to the term by the target language speech community).
2. Naturalization (as already defined).
3. Semantic extension by analogy of form or function.
4. Composition - joining two or more full meaning source language words in creating the target language equivalent term.
5. Calque or borrowing.

We have thus reflected either number from 1 to 5 in respective terms, against each term, as indicative of the approach in operation. Where more than one approach is the case, the relative numbers have also been indicated.

Problems

The onerous task of promoting the scientific and technical use of languages of limited diffusion is commonly shrouded with uncertainties as to the scope and purpose of the exercise (Anyaehe, 1997). The requisite discipline, sincerity and sense of responsibility targeted through the awareness on terminology as a specific science, a recognised practice with standardised products, as created in this discourse, to substantiate the works cited, have guided the assignment of equivalent terms in the target language to those of the source language, even in identifying and dealing with the common problem of (differences between) communicative units used in the scientific and technical domain, and those in ordinary language, on one hand, and exploring and analysing the domain and other factors that led to the assignment of special referents to ordinary lexical units; to establish the

extent to which these factors could be predicted in the domain reassignment of lexical units, on the other hand. Apart from the problem of special use of normal lexical units, there is also the problem of addressing our minds to the problem of expressive paradigms and syntagms morphologically specific to them, as associated with scientific and technical domains, like medicine and information technology, in our attempts to appreciate and analyse the definitions given to sampled concepts in English Dictionaries, and by medical experts. It is noteworthy that scientific and technical texts may involve the use of highly technical, specialized and restricted vocabularies, abstract terms, symbols and abbreviations, incomprehensible to the uninitiated in given areas, and irrespective of the language into which they are translated, they supposedly produce one invariant message version (Iwunze, 2014).

The common orientation of the targeted population; the illiterate igbo masses, in traditional medicine, was explored as a raw material, in our attempts to match both cultures in contact in the terminological exercise, despite linguistic divergences.

A bilingual glossary of thirty terms in epidemiology (English-Igbo) is shown in Table 1.

CONCLUSION

This study which has been motivated by the urgent need to address the problem of the lacuna in medical terminology in African languages, demonstrates a means of bridging the terminological gap between Igbo, a good example of such endangered species of African languages, on one hand, and English and other European languages, on the other hand. It has been focused on names of Epidemics, as only one out of many issues in Terminology of Epidemiology in the said language. The trend of no or insufficient equivalents of names of most epidemics in Igbo has been noted with concern, as its inherent lack of related awareness among the masses - the illiterate population, owing to their inability to adequately access information of great health value related to the scourges, as a result of their disabilities in languages conveying such information, due to illiteracy, has been highlighted.

A definitive framework of the two major concepts in the title of our discourse- "Medical Terminology" and "Epidemiology" was established, prior to the analytical review of literature related to the subjects of need for regular, effective and adequate information in the health sector, and language (terminological) challenges to effective information dissemination therein. An appraisal of Igbo medical terminology, followed, to identify some relative challenges yet to be surmounted. Based on the insight given on the control for the study, methodology and related problems and solutions, a bilingual glossary of thirty terms in Epidemiology has been showcased as a

Table 1. A bilingual glossary of thirty terms in epidemiology (English-Igbo).

S/N	Source Language (English) Term	Definition	Target Language (Igbo) Equivalent	Method
1	BIRD FLU	A highly infectious disease caused by influenza virus and affects all kinds of birds	ORIANNUNU	4
2	CHICKEN POX	Infectious disease which causes a slight fever and spots on the body	OKO RAISI/OKOOYI	1/3/4
3	CHOLERA	A disease caused by eating infected food or drinking contaminated water which causes sickness and sometimes leads to death.	OTORORORO/OTORO	3
4	CONJUNCTIVITIS	A painful and infectious disease of the eye that makes it red	ARI ANYAOBARA	3
5	DIARRHOEA	An illness in which waste from the bowels is watery and comes out often	ORIA ONYUPIRIPIRI/ ORIA NSI MMIRI-MMIRI)	3
6	DIPHTERIA	A serious infectious throat disease that makes breathing difficult	OGBUN'OKPO	3
7	DYSENTRY	A disease of bowels that makes them bleed and pass much more waste than usual	ORIA NSI OBARA-OBARA	3
8	EBOLA VIRUS	A viral disease that causes bleeding from many parts of the body and usually causes death.	ORIA EBOLA	5/2
9	GUINEA WORM	A worm that attacks those living in riverine areas, usually contacted by matching, swimming into the body and bursting out at maturity through the leg with offensive odour.	NWOORI /MKPURUMKPU NTIWAUKWU	1/3
10	HEPATITIS	A viral disease that interferes with the functioning of the liver spread through consumption of food or water contaminated by fecal matter. It makes the skin yellow. There are several types- Hepatitis A. which is less severe and hepatitis B and C which are less serious.	APA IMEJU/OCHANANYA/AKUM OCHANANYA	3
11	HIV AIDS	Acquired Immune Deficiency Syndrome. A serious disease that stops the body from defending itself against infections, and usually causes death.	ORIA MMINWURU	3
12	INFLUENZA	An infectious disease that is like a very bad cold	OYIOTUTU OJOO NA-EFE N'IKUKU	3
13	KWASHIOKOR	A form of severe protein-energy malnutrition characterized by edema, irritability, anorexia, ulcerating dermatoses, and an enlarged liver with fatty infiltrates.	KWASHIOKO	2
14	LASSA FEVER	Viral disease carried by rats. It is common in West Africa. Infections occur through direct contact with or consumption of food contaminated by rodent's urine or fecal matter containing virus particles.	OYINSHI MMIRI NA NSI OKE	3
15	LEPROSY	A very serious infectious disease in which the flesh and nerves are gradually destroyed	EKPENTA	1
16	MALARIA	A disease that is common in hot countries that you get when a type of mosquito bites you	AKUM/IBA	1

Table 1. Contd.

17	MEASLES	An infectious illness in which one has a fever and small red spots on one's face and body	AKPATA	1
18	MENINGITIS	A serious illness in which the outer part of the brain becomes swollen. It is a bacterial disease causing an inflammation of the lining of the brain and spinal cord. Some of the symptoms are : stiff neck, high fever, headaches, vomiting.	OHIE/KWE	3
19	MUMPS	An infectious illness which makes your neck swell and become painful	NZAOLU	3
20	PNEUMONIA	A serious illness that affects your lungs and makes it difficult for you to breath	OGBUNAMKPIRI	3
21	POLIOMYELITIS	A serious infectious disease of the nerves in the spine that often results in someone being permanently unable to move particular muscles	OKUMKPARA	3
22	RIVER BLINDNESS	A disease caused by a worm of a genus onchocerca, especially as transmitted to humans by flies and often causing blindness. Very common in tropical Africa . Also called Onchocerciasis	ISI ANYAOCHA/ISI OSINIJIJABIA	3
23	SARS(SEVERE ACUTE RESPIRATOY SYNDROME)	A viral respiratory disease caused by sars coronavirus	ORIA MKPOCHIUME	3
24	SCABIES	Skin disease caused by mites and other smaller insects. Causes small pimple like rashes on the body	OKOAKPUKPOAHU	3
25	SMALL POX	An infectious disease which causes and leaves spots on the body	KITIKPA	1
26	TRYPANOSOMIASIS	Disease caused by the parasitic protozoa trypanosoma, it is transmitted to humans via the bite of a blood sucking tse-tse fly infectious leads to malaise and irregular fevers	ORIA NTURUMURA	3
27	TUBERCLOSIS	An infectious disease that affects many parts of the body, especially the lungs	UKWARA NTA	1/3
28	TYPHOID FEVER	A serious infectious disease that is caused by dirty food or drink. It is a bacterial disease spread through contact with food and water contaminated by fecal matter/sewage	OYI TAIFOIDI	2/1/3
29	WHOOPING COUGH	An infectious bacterial disease, that is highly contagious respiratory track infection. It is marked by a severe hacking cough followed by a high pitched intake of breath that sounds like « Whoop »	UKWARA NTUGHU	3
30	YELLOW FEVER	A mosquito borne viral disease which makes the skin to turn slightly yellow. The symptoms range from influenza to severe hepatitis and haemorrhagic fever	OCHANANYA	1/3

tangible product of our adequately motivated study of the forms and meanings of units of reference (terms) in a sensitively selected aspect of epidemiology in the field of

medicine. It is hoped to provoke collaborative efforts by indigeneous language engineers, in the bid to guarantee quicker access to information of health value to the

masses, through the elimination of all related language barriers, as well as be a tool of inestimable value to the mass media, the national and state orientation agencies, the Federal and state ministries of health, and indeed, all stakeholders, for regular education of the targeted audience in igbo, through radio and television airtimes, seminars, workshops and other enlightenment campaign programmes and strategies.

REFERENCES

- Ajayi K (1985). Educational Policy Research in Nigeria: The State of the Art Position. NERC Conference, University of Ibadan.
- Anyaehe EO (1997). Research in Terminology: the Science, the Practice and the Product. SIT (Studies in Terminology), 1:1-4, Okigwe, Fasmen Educational and Research Publications.
- Bullon S et al. (2007). Longman Dictionary of Contemporary English, England, Pearson Education Ltd.
- Dubuc R (1978). *Manuel pratique de Terminologie*.pg.108, Quebec, Linguattech.
- Ezuko R (1998). Igbo Legal Terminology. SIT (Studies in Terminology), 2:45-53, Okigwe, Fasmen Educational and Research Publications.
- Iwunze EI (2014). Translation in a Reflection: A Foundational Approach to Theory and Practice, Enugu, Skinno Publishers.
- Iwunze EI, Cookey SA (2007). Translation and the Development of the Nigerian Nation: the Health Angle. Convergence: English and Nigerian Languages (A Festschrift For Munzali, A. Jibril), Port Harcourt, M & J Grand Orbit Communications Ltd. & Emhai Press.
- Nwanjoku AC (1998). Terminology Research and Standardization. SIT (Studies In Terminology), 2:1-10, Okigwe, Fasmen Educational and Research Publications.
- Ross H, Mico P (1980). Theory and Practice in Health Education, California, Mayfield Publishing Company.