

An Analysis of Code-mixing in Doctor-Patient Communication in Rasheed Shekoni Teaching Hospital Dutse, Jigawa State.

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ABSTRACT

This study analyzes Code-mixing in Doctor-Patient Communication in Rasheed Shekoni teaching hospital Jigawa state. The objectives of the research are to identify the instances of code-mixing in Doctor-Patient communication, analyse the types of code-mixing in Doctor-Patient communication, examine the reasons for the use of code-mixing as well as investigate the linguistic effects of code-mixing in Doctor-Patient communication. The study employs a typology of code-mixing Theory for the data analysis and ethnography of communication method for the solicitation of data. The research finding shows that, Code-mixing in Rasheed Shekoni teaching hospital cuts across the three types comprising insertion, alternation as well as congruent lexicalization and, it is complex due to the application of some linguistic aspects involving lack of equivalence, abbreviation, show of identity, euphemism, calling attention, making explanation, expressing sympathy, borrowing, clipping, making prescription, coining a word, expressing solace, making appointment, emphasis as well as making referral. It furthermore proves that, the actual or intended meaning is sometimes not precisely communicated to the parties involved due to the unclarity / vagueness of the code-mixed lexical items.

Keywords:

- Code-mixing,
- Doctor,
- Patient,
- Communication

1. Introduction

This study intends to investigate the code-mixing in Doctor-patient Communication in Rasheed Shekoni teaching hospital Jigawa State from Hausa into English or English into Hausa as well as standard and non-standard language. The work deals with the study of language and the medicine involving communication of ideas that largely fall under the domain of sociolinguistics, code-mixing in particular. “Code-mixing is the alternate use of two or more languages, varieties of a language, or even speech styles”. (Hymes, 1977:103). Poplack (1980:581-618) states code-mixing as “the alternation of two languages within a single discourse or constituent” and Auer (1984:1) says that, code-mixing is “the alternate use of more than one language”. It is also defined as the use of several languages or dialects in the same conversation or sentence by the bilingual people (Chloros 2009). It is simply a “juxtaposition within the same conversation of speech belonging to two different grammatical systems or sub-system (Gumperz 1982).

Maschler (1998:125) views code-mixing or mixed codes as “using two languages such as a third, new code emerges, in which elements from the two languages are incorporated into a structurally definable pattern. Meyerhoff (2006:115-116) opines that “it generally refers to alternations between varieties, or codes, within a clause or phrase, often elicit more strongly negative evaluations than alternations or code-switching across clause. Code-mixing is one of the major kinds of language choice which is subtler than ‘code-switching’ as stated by Fasold (1984:66). In code-mixed sentences, pieces of the one language are used while a speaker is basically using another language. Hudson (1996: 53) defines code mixing as a kind of linguistic cocktail- a few words of one language, then a few words of the other, then back to the first for a few more words and so on. This definition proves that code-mixing is an interchanging phenomenon involving the circulation of words spoken in languages at a time Danillah (2018) defines code as a system that is used by people to communicate with each other, the code consists of a dialect, register, style, accent or language variety or even languages. Code-mixing means mixing two languages or use both languages together in a single utterance while code-switching stands for switching the situation from one code to another. Code-mixing occurs when lexical items and grammatical features of two or more languages exist in the same sentence (Muysken, 2000). It is indeed a phenomenon largely involving the hybridization of two languages in a single conversation, it also refers to the embedding of linguistic units such as phrases, words, and morphemes of one language into an utterance of a particular language. Code-mixing is an intra-sentential process that solely dwells within a one definite sentence while code-switching is inter-sentential that affects the sentence boundary in which the speaker completely changes the sentence of another language. It deals with all cases where lexical items and grammatical features from two languages appear in one sentence. The term code-mixing emphasizes hybridization, and the term code-switching emphasizes movement from one language to another. Mixing and switching probably occur to some extent in the speech of all bilinguals, so that there is a sense in which a person capable of using two languages.

Code-mixing from the above definitions are generalized to be the art or science of alternating, hybridizing, changing, transferring or blending two or more languages in a single discourse or conversation; it is the subsequent alternation of vocabulary equivalents of languages. Code-mixing does exist necessarily in bilingual or multilingual settings and therefore, occur in both written and spoken languages. The written could be in newsletter, magazine, novel and short stories. And the spoken could be in TV Program, radio, song, movie, teaching and learning processes. Thus, code-mixing occurs in all languages as long as there is contact and also use in technology like internet and other social networking like Facebook, WhatsApp, Tik-tok etc.

And, it is predominantly practiced by bilingual speakers, thus, a monolingual could not in any way be part of the code-mixing activity.

Code-mixing in multilingual nation like Nigeria has become an inextricable part of our daily interactions which we could hardly live in this heterogeneous and multilingual Nation without it, it certainly penetrates every nook and corner of various human endeavors and widely practiced in numerous social contexts and situations e.g. in media broadcasts, films, songs, novels, palace conversations, markets, companies, schools, classroom instructions, offices, mosques and churches including hospitals where medical doctors and their patients interaction is merely engrossed in mixing the codes of two or more languages.

1.1. Distinction between Code-Mixing and Code-Switching

There are different views about the distinction between code mixing and Code-switching. Some linguists have used Code-switching as the cover term to refer to these two phenomena. For example, Scotton (1992) uses these terms interchangeably. Bhatia (2004) too, uses code mixing as a cover term for code-mixing and Code-switching. In this respect Clyne (2003: 75) distinguishes between the processes and says: We should reserve Code-switching for transference of individual lexical items through to whole stretches of speech; but we should adopt different terms like transversion for cases where the speaker crosses over completely into the other language. There are others like Muysken (2000) who uses Code-switching for alternation, i.e., when speakers alternate between languages in the same conversation. Code-switching, as Gardner-Chloros (2009) mentions, has gained larger investigation in the language interaction phenomenon, among most of the linguists, there are no general consensus or agreements on maintaining or not the distinction between the language contact phenomena. Other scholars like Hill and Hill (1980: 122) reject the distinction between Code-switching and code mixing and use the terms interchangeably without seeing any difference between them. Thus, there are contentions over the distinction between Code-switching and Code-mixing (Abu-Krooz, Qasim and Al-Azzawi, 2019)

1.1.2 Features of Code-Mixing

Code-mixing is characterized with some features comprising linguistic competence, intra-sentential phenomenon, no change in the topic, purpose and function involving expressing a particular meaning or nuance, highlighting a particular concept, showing solidarity or inclusion (Wardhaugh 1998).

Linguistic competence: this refers to the ability of a speaker to use two or more languages, the vocabularies of the mixed languages must be known well by the mixer.

Intra-sentential phenomenon: code-mixing is used specifically within a single sentence or utterance, the linguistic items of one language are incorporated into the sentences of another language.

No change in the topic, purpose or function: this deals with expressing only one issue while mixing the languages. The topic, purpose or function remained unchanged when the languages are blended.

Highlighting a particular concept: this refers to the emphasis shown on an issue or concept by employing another language item into the utterance. The linguistic elements are used into the other structure just to call for attention on it.

Showing solidarity or inclusion: code-mixing is characterized with being part of a group. The speaker mixes codes particularly to show membership in a specific linguist composition.

1.1.3 Types of Code-Mixing

There are different views regarding the types of code-mixing which includes that of Suwito (1985) who categorized code-mixing into two types such as Inner code-mixing and outer code-mixing. The code-mixing refers to the mixing of linguistic items within the original language and its variations, while the outer code-mixing is concerned with mixing from the foreign language. Similarly, Hoffman (1991) divided code-mixing into three types such as intra-sentential, inter-sentential and intra-lexical code-mixing, the intra-sentential is the mixing within a single sentence. And inter-sentential occurs between sentences. While intra-lexical code-mixing is the mixing within a single word. Furthermore, Siregar (1996) categorized code-mixing into two: intra-sentential mixing and extra-sentential mixing. Intra-sentential is the alternation of single words of phrases to clauses within a single sentence or utterance and the extra-sentential mixing refers to the mixing at sentence boundaries i.e it occurs between sentences by affixing one language into another. Moreover, According to Muysken (2000), code-mixing is divided into three types, which are insertion, alternation, and congruent lexicalization. This type therefore, is the one used for the conduct of this research

Insertion: This is the insertion of material (lexical items or entire constituents) from one language into a structure from the other language. It is the insertion of foreign lexical or phrasal category into a given structure. The matrix structural properties are mixed into the based structure, the foreign lexical or phrasal category is inserted into the given structure. The insertion here stands solely at lexical or phrasal level less than a clause or sentence.

Alternation: The second type proposed by Muysken (2000: 3-4) is the alternation between structures from the other language. Alternation (associated with Poplack in Muysken, 2000: 4) views the constraints on mixing in terms of the compatibility or equivalence of the languages involved at the switch point. In this perspective, code mixing is typically related to the switching of codes between turns or utterances. It is a true switch from one language to the other, involving both grammar and lexicon. It seems that halfway through the sentence, one language is replaced by the other. Alternation is just a special case of code switching, as it takes place between utterances in a turn or between turns.

Congruent lexicalization: It refers to the situation where two languages share grammatical structures which can be filled lexically with elements from either language. The forms of code mixing can be words or phrases whose meanings are generally known by people in its first language. It specifically deals with lexical correspondence used between the two languages. It underlies the study of style shifting and dialect/standard variation, as in the work of Labov (1972) and Trudgill (1986)

This research employs an ethnography of Communication method postulated by Dell Hymes in 1962. The theoretical framework adopted for the study is the theory of code-mixing proposed by Pieter Muysken in the year 2000 popularly known as “a typology of code-mixing. The theory is particularly concerned with analysis of code-mixing used in spoken and written discourse based on its three types. It deals with providing different aspects contained in the use of code-mixing commonly make in sociolinguistic environment by people largely influenced by other languages. The assumptions therefore, are based on the analysis of language mixture, matrix structural formation, variation in mixing pattern, bilingual speech and language change, multivariational and grammatical dimensions of lexical elements which are morphologically

integrated that form a single syntactic structure. It is thus, appropriate for the analysis of the hybridized two languages in a single conversation in bilingual medical settings. The verbal interaction existing in communication between the doctors and their patients is basically in line with assumptions of this theory and therefore, consider appropriate to be used in analyzing the utterances expressed. The approach enables the researcher to identify, investigate and analyse the types, reasons as well linguistic effects of code-mixing used in Doctor-Patient communication in Hospitals.

2.0 Data Presentation and Analysis.

The data collected during the conduct of this Research are analyzed and presented as reasons for code-mixing in an encounter between a doctor and patient in the aforementioned general hospital: Lack of Equivalence, Abbreviation, Show of Identity, Euphemism, Calling Attention, Making Explanation, Expressing Sympathy, Borrowing, Clipping, Making Prescription, Coining a word, Expressing Solace, Making Appointment, Emphasis and Making Referral. The instances under each item are hereby presented as follows:

2.1 Lack of Equivalence

This is a situation where one Language does not have an equal or corresponding item in another language that shares the same meaning, value or function. In this instance, the doctor and patient code-mix. Below are instances of such occurrence whose equivalents are lacking:

- a. **Physician:** Kana da matsala ta *uric acid* ne.
Gloss: You do have an issue of uric acid.
- b. **Gynaecologist:** Za ki dinga *kegal exercise*.
Gloss: You will be on kegal exercise.
- c. **Physician:** Duk wani abu *carbohydrate* ka haqura da shi.
Gloss: You should avoid anything carbohydrate.
- d. **Physician:** Allurar *Mixtard* ceko *Soluble*?
Gloss: Is the injection Mixtard or Soluble?
- e. **Patient:** Amma an tava yi mini *fluconazole injection*.
Gloss: But, I was once given fluconazole injection.

In example (1a) above, a physician code-mixed an English medical term ‘uric acid’ into his Hausa interaction with a patient because, it has no exact corresponding equivalent. The linguistic equivalent of the term is casually unavailable in the based structure which necessitates the use of the term by the physician. The physician mixed the term while informing the patient his diagnosed illness. The code-mixing is an insertion type whose semantic meaning is not effectively understood by the patient as he instantly enquired for further clarification from the doctor on the mixed term. Similarly, in example (1b), a gynaecologist mixed a noun phrase ‘kegal exercise’ while interacting with a patient in his attempt to find solution to the ailing nursing mother as she is encountering problem in her womb after delivery. The mixed medical term does not have an equivalent in Hausa language which entices the gynaecologist to directly use it in his Hausa expression. This code-mixing is an alternation type of mixing and its meaning is equally not comprehended by the patient for the fact that she never heard it before as confirmed by the patient. While in example (1c), a physician code-mixed ‘carbohydrate’, which lacks a corresponding item in the language while

advising a patient of what to eat as a diabetic. This mixing is an insertion type effectively understood by the patient. In example (1d), another physician mixed two other English medical terms ‘Mixtard’ and ‘Soluble’ in his utterance while asking a diabetic patient. The terms are the specific names for diabetes injection whose Hausa equivalents are completely lacking, and, as a matter of necessity, the physician directly used them as they were in the based structure. This code-mixing is an alternation type that is well understood by the patient as positively responded. Moreover in example (1e), a patient code-mixed another English noun phrase which is ‘fluconazole injection’ while briefing an ophthalmologist about his previous stand regarding the medication. The phrase contains an English-Hausa nonequivalent word which is ‘fluconazole’ which is a name of a particular medicine, thus, it is used directly as it is. This code-mixing is an alternation type well understood by the doctor.

2. Abbreviation

This occurs by shortening, truncating, abridging and abbreviating a word, it is often used by the doctor as a more-or-less a technical term among them. The abbreviated English words mixed in the interaction include:

- a. **Physician:** An tava yi miki cs. ne?
Gloss: have you ever undergone cs.?
- b. **Physician:** Bayan kwana uku sai kazo mu gwada BP xin.
Gloss: You can come after three days for the BP test.
- c. **Gynaecologist:** PID ne da kuma ovarian cysts.
Gloss: It is PID and other ovarian case.
- d. **Dentist:** S & P za a yi maka.
Gloss: S and P will be done to you.
- e. **Patient:** Kuma na sha ORS amma har yanzu.
Gloss: I took ORS but still in vain.

In example (2a), a physician code-mixed an English abbreviated form “cs” while interrogating a pregnant woman on her maternal status. The term stands for ‘caesarean’, which is a foreign structure being inserted into the base for inquiry to the patient, the physician used the form purposely to make utterance brief. The use of the abbreviated form is not necessary for the fact that it does have another synonym in the language “theatre” which is already borrowed, adopted and well understood as Hausa word “tiyata” that could serve as the substitution. The abbreviation stands to be used in accusative form of the sentence and, it is an insertion type of code-mixing, the semantic meaning is effectively communicated as the question is appropriately responded by the female patient. Similarly, in example (2b), another physician inserted another abbreviated form which is ‘bp’. The full form is blood pressure which is the name of a disease, and the use could be avoided as there is an alternative in the language of communication ‘hawanjini’. The physician used it while instructing the patient to come for a retest in an effort to normalize the patient’s disturbing issue. This code-mixing similarly, is an insertion type, the meaning here, is however, not understood by the patient for requesting further clarification. While in example (2c), a gynaecologist used ‘pid’ and ‘ovarian cysts’ in his utterance. The abbreviated form ‘pid’ stands for pelvic inflammatory disease and, the mixture is not necessary because, the two words could be translated into Hausa as ‘ciwonmara’. This code-mixing is an alternation type which is semantically not perceived by

the ailing patient. Furthermore, a dentist in example (2d) inserted ‘s & p’ while suggesting the service that should be offered for the patient. The abbreviation stands for scaling and polishing which means the medical service for cleaning or scrubbing the teeth so as to make them tidy and restore their true colour. And, the mixture is not necessary as it could be substituted with ‘wankinhaqori’. This code-mixing is an alternation type whose semantic meaning is absolutely not communicated for the fact that, the patient never heard it before which prompted him to ask question. And, in example (2e), a patient code-mixed ‘ORS’ while reporting to the physician what had been done as medication measure taken by the patient. The abbreviated term means oral rehydration solution used to treat rehydration caused by either diarrhea, vomiting or excessive sweating etc. the use of the term is not necessary because, the available Hausa phrase ‘ruwangishiri da sikari’ could be used. This mixture is an insertion type effectively understood by the physician.

2.3 Show of Identity.

The doctors and patients here code in their conversations in order to show their educational background or status. The instances portraying this aspect in doctors and patients’ utterances are:

- a. **Patient:** Kuma ina fama da *nausea and vomiting* .
Gloss: I’m also suffering from nausea and vomiting.
- b. **Physician:** Zaki je ayi miki *scanning*.
Gloss: You should go for scanning.
- c. **Patient:** Na tava yin *accident* na karye a cinya.
Gloss: I once had an accident and had my thigh fractured.
- d. **Patient:** Sai dai irin *constipation* haka.
Gloss: It is except a mere constipation.
- e. **Patient:** Amma dai da ina da *chronic arthritis*.
Gloss: Although, I had a chronic arthritis before.

In example (3a), a female pregnant patient code-mixed a compound noun “*nausea and vomiting*” while reporting to the physician on the symptoms she experienced. The patient used the term purposely to present herself as an educated and therefore, should be recognized and be given special consideration. The use of the codes is not necessary because, their linguistic equivalents are readily available in the based structures as ‘tashinzuciya’ and ‘amai’. This code-mixing is used as an alternation type and therefore, serving as accusative nominal phrase of the sentence. The semantic meaning is effectively communicated to the physician. While in example (3b), a physician mixed another medical term ‘scanning’ while instructing the pregnant woman for a particular medical investigation. The mixture of the term is similarly unnecessary because, its equivalent in Hausa language could be ‘hoto’. The physician used the term as a sign of being in a medical cycle. This code-mixing is a congruent lexicalization whose meaning is also understood by the patient. Again, in example (3c), a patient also used ‘accident’ when informing the physician on his previous health background. The patient mixed the term as an identity of being an educated and, its usage is not a must, for the fact that ‘haxari’ could be used as an equivalent. This mixture is a congruent lexicalization type of which the meaning is well comprehended by the physician. Similarly, a patient in example (3d), mixed ‘constipation’ in his Hausa interaction with physician, the patient code-mixed the

term for giving information to the doctor of what he feels. This code-mixing is however, an insertion type similarly, understood by the physician. Whereas in example (3e), another patient also code-mixed another English medical term which is ‘chronic arthritis’ while telling the physician his health history. The patient used the term just to portray himself as an enlightened person. The code-mixing here, is an alternation type duly comprehended by the physician.

2.4 Euphemism

Doctors and patients code-mixed so as to make their utterances more polite. The instances of words or phrases mixed as euphemism are:

- a. **Gynaecologist:** Yaushe ne kika ga *last menses* xinki?
Gloss: When did you see your last menses?
- b. **Patient:** Wallahi! Tunda na sami *miscarriage* nake ta fama.
Gloss: I had miscarriage, since then, I was suffering
- c. **Gynaecologist:** An sami *vaginal inflammation* ne amma ba matsala
Gloss: There is a vaginal inflammation but there will be no problem.
- d. **Gynaecologist:** Akwai *discharge* ne?
Gloss: Is there discharge?
- e. **Patient:** Sai su kace ba *tear*,
Gloss: They said, there was no tear.

In example (4a), a gynaecologist code-mixed an English nominal phrase “last menses” while interrogating a female patient in Hausa. The physician used the phrase purposely to shun away from calling the real name in Hausa “Haila” as it sounds unpleasant. The use of the term is not necessary for the fact that it does have another synonym in the language “Al’ada” that could serve as substitution. He euphemistically substituted it for the interrogation to be pleasant to the patient. The phrase stands to be used in accusative form of the sentence and also, an insertion type of code-mixing, the semantic meaning is effectively communicated as the question is appropriately responded by the patient. While another female patient in example (4b), inserted ‘miscarriage’ in her Hausa conversation with a physician, the usage is for the fact that the female patient does not want use the Hausa word ‘vari’ as it sounds impolite for her to use it to the male physician. This code-mixing is also an insertion type whose meaning is equally understood by the physician. Whereas in example (4c), a gynaecologist mixed another English noun phrase ‘vaginal inflammation’ in his Hausa interaction with a female patient that has pains in her vagina. The gynaecologist used the term purposely to shun away from using ‘xaxewarfarji’ for its being unpleasant. The code-mixing is notwithstanding, an insertion type however, not well understood by the female patient as clarification was needed. Similarly, the same gynaecologist in example (4d), mixed another item ‘discharge’ while interrogating another female patient in Hausa language. The term is used so as to avoid using its Hausa equivalent ‘fitarruwa’ as it sounds offensive when used to females. The code-mixing is an alternation type which is however, not understood by the patient. Also, in example (4e), a female patient alternated ‘tear’ when reporting her circumstance regarding the previous visit to the maternity. The term ‘tear’ is a vaginal injury occurred during delivery, and it is used as a euphemism for the Hausa word ‘tsagewarfarji’ which indeed, very unpleasant to be used by the female patient. This mixture is an alternation type whose meaning is effectively understood by the physician.

2.5 Calling Attention

This is the use of a word or phrase by both medical doctors and their patients purposely to attract attention of each other towards a specific medical issue. The English lexical items are mixed in the interaction to attach special concern to an issue whose importance is to be noticed, taken care of or attended. The instances are as follows:

- a. **Patient:** Likita don Allah kazo ta fara *bleeding* fa.
Gloss: Please, attend her doctor, she started bleeding.
- b. **Dentist:** Idan ya zama *habitual* zai bada *stains*.
Gloss: It will give stains if it becomes habitual.
- c. **Pediatrician:** Gashi nan har *gasping* yake.
Gloss: look! It is even gasping.
- d. **Dentist:** *Then* sai a yi *crowning* xinsa.
Gloss: The crowning then should be done for the tooth.
- e. **Patient:** Yana can a *emergency* a kwance.
Gloss: He is there at emergency hospitalised.

In example (5a), a patient's relative inserted an English medical term 'bleeding' at the time when communicating to the physician about the antenatal patient who is brought to the maternity ward for birth. The term is specifically used to call the attention of the doctor for a prompt medical assistance. This mixture is an insertion type effectively understood by the physician. Additionally, in example (5b), a dentist alternated two English terms in his Hausa interaction which are: 'habitual' and 'stains'. The words are mixed while stressing the danger of going to bed without brushing the teeth to the patient who came for medical consultation on how to take care of his teeth. This mixture is to attract attention which is therefore, identified as an alternation type of code-mixing effectively understood by the enlightened patient. Similarly, in example (5c), a pediatrician code-mixed 'gasping' while interacting with ailing infant's mother. The term is mixed in attracting the mother's attention on the critical health condition of the ailing infant. This code-mixing is an insertion type which is not comprehended by the mother of the ailing infant. Furthermore, in example (5d), a dentist alternated two English lexicons 'then, and 'crowning' in his Hausa conversation with a tooth aching patient who came for a treatment. The two lexicons are blended for the patient to note the importance of, particularly the latter (crowing). This code-mixing is an alternation type equally not effectively understood because, the patient solicited for an explanation of the word 'crowning'. Moreover, in example (5e), a patient's relative inserted 'emergency' while reporting where a patient with severe health deteriorating condition is to the physician, the mixed word is therefore, used to call for an instant response of the physician which is indeed perfectly understood by the physician.

2.6 Making Explanation

This is the use of a language to state what happened or how something is or works in a particular situation. It is the process of telling what, when, why and how an issue is. The medical doctors usually explain to their patients what happened, when it happened, why and how a particular ailment affects their well-being; in the course of this explanation therefore,

the medical doctors mix English medical terms while interacting with the patients. The code mixed instances are:

- a. **Physician:** Ee *pneumonia* ce ke damunsa.
Gloss: Yes, he suffered from pneumonia.
- b. **Ophthalmologist:** Eye drop ne kullum sau uku
Gloss: It is an eye drop, three times a day.
- c. **Dermatologist:** Da ka shafa zai yi *disinfecting* xin gurin.
Gloss: The wound will be disinfected as soon as you rub it.
- d. **Gynaecologist:** Aiki za a yi miki saboda *fibroids issue* ne.
Gloss: Operation must be done for you because of the fibroids issue.
- e. **Dentist:** Wannan *tooth cavity* ne.
Gloss: This is tooth cavity.

In example (6a), a physician code-mixed an English medical term ‘pneumonia’ while explaining to the ailing child’s mother the diagnosed illness affecting her son. The term is used just to make an explanation by the physician. This code-mixing is a congruent lexicalization whose semantic meaning is well understood by the patient. Similarly, in example (6b), an ophthalmologist code-mixed an English medical noun phrase ‘eye drop’ while explaining to the patient on how to use a particular medicine. The mixed term is the name of a medicine that cures eye problem which is used purposely to make an explanation. This code-mixing is an alternation type which is understood in the context of its usage. While a dermatologist in example (6c), mixed ‘disinfecting’ when telling the patient about the possible outcome of a medicine if used. This code is an insertion type similarly, understood based on the context by the patient. Again, in example (6d), a gynaecologist inserted an English medical phrase ‘fibroids issue’ while making explanation on the female patient ailment that an operation must be done for her. This is an insertion type of code-mixing which is also understood by the patient. And, in example (6e), a dentist also inserted another English nominal phrase ‘tooth cavity’ in his Hausa conversation with a female patient, the term is used while explaining to the patient the nature of her tooth problem. The insertion type of code-mixing is hereby identified whose meaning is as well comprehended.

2.7 Expressing Sympathy

Sympathy here refers to the use of a language by medical doctors to express feeling of pity or kindness to patients. It is the feeling of being humane and sorry as well as showing care about patients’ condition using language. The medical doctors are usually expressing their kindheartedness to their patients each time they are suffering in which they code-mix when sympathizing with them. The code-mixed instances used are:

- a. **Physician:** Ya jikin naka? Akwai *improvement*?
Gloss: How is your condition? Is there any improvement?
- b. **Audiologist:** Sorry, e shiru, sannu-sannu
Gloss: Sorry, calm down, be patient.

c. **Dentist:** Akwai *sensitivity*?

Gloss: Is there sensitivity?

A physician in example (7a), code-mixed an English lexical item ‘improvement’ while showing sympathy to the patient thereby awaiting to hear a positive response from him, the term is used just to feel pity to patient’s condition. And, this is an alternation type which is understood by the patient. While an audiologist in example (7b), equally mixed ‘sorry’ in his effort to express pity to the crying child whose ear is severely throbbing excruciatingly. The mixture is a congruent lexicalization type commonly understood in Hausa society. In example (7c) moreover, a dentist alternated ‘sensitivity’ while scaling and polishing the teeth of a patient thereby sympathetically hoping the patient not feel pain during the service. However, the patient affirmed to the doctor via his facial expression that there is, the code-mixing is an alternation type though, not understood by the patient as required for further explanation.

8. Borrowing

This refers to the process of taking English language words and using them as Hausa language vocabularies. It is in other words, the adoption of vocabularies of English language into Hausa language for common use. The patients as well as the medical doctors use some English lexical items that are commonly incorporated as Hausa language vocabularies for use. The instances where these borrowed words are used include:

a. **Pediatrician:** Aje a xauko *file* xin ba matsala.

Gloss: Go and bring the file, there is no problem.

b. **Audiologist:** Je kasamo *bandage*.

Gloss: Go and get bandage.

c. **Patient:** Akwai *chemist* a kusa da mu.

Gloss: There is chemist close to us.

d. **Ophthalmologist:** Cire *glass* xin.

Gloss: Remove the glass.

e. **Pediatrician:** Yanzu wannan *theatre* za ku tafi.

Gloss: You are now to go for theatre.

In example (8a) above, a pediatrician code-mixed an English borrowed term ‘file’ into Hausa language while interacting with a patient’s mother, the mixture was prompted at the time when she came late and requesting for the doctor’s attention. The mixed word is being borrowed and integrated as part of Hausa vocabulary written as ‘fayil’ and pronounced the same way as English. This code-mixing is a congruent lexicalization type understood by the patient. While in example (8b), an audiologist mixed another borrowed word ‘bandage’ which is pronounced in Hausa as ‘bandeji’. The audiologist used the word when the earache patient was diagnosed with ear infection and therefore, need an ear dressing. This mixture is a congruent lexicalization type also understood by the patient. Similarly, in example (8c), another patient inserted another borrowed item ‘chemist’ while informing the doctor where he could buy the prescribed drugs. The borrowed term is pronounced as ‘kemis’. The code-mixing is similarly, a congruent lexicalization type invariably understood and adopted by all the Hausa speakers. Also, in example (8d), an ophthalmologist inserted ‘glass’ which is an English borrowed word widely used by Hausa people, it is used by the doctor while instructing the eye aching patient

just to allow him thoroughly examined the affected left eye. The borrowed word is pronounced as 'gilas'. This is notwithstanding, a congruent lexicalization type of code-mixing which is also comprehended by the patient. Whereas, a pediatrician in example (8e) inserted 'theatre' in his utterance. The borrowed word is pronounced in Hausa as 'tiyata' and therefore, used to communicate to the child's mother on what should be done. The code-mixing is again, a congruent lexicalization largely adopted and used as Hausa lexicon.

2.9 Clipping

This is an act of abridging a word to smaller form, the longer words are reduced, truncated or shortened to only one syllable. The medical doctors code-mix some medical terms that are having the clipped form directly into their Hausa conversation with patients. The instances are:

- a. **Dermatologist:** *Kije lab.* Su yi miki wannan gwajin.
Gloss: You should go to lab for this test.
- b. **Patient:** *Tabs ne wasu* 'yan qanana.
Gloss: They are very small tabs.
- c. **Patient:** *Saboda haka sai na yi amfani da Amoxil.*
Gloss: And, I therefore, used amoxil.

In example (9a), a dermatologist inserted an English clipped form of a word 'lab' in his interaction with a patient, the full form of 'lab' is laboratory, the doctor used it so as to direct the patient for an investigation about an illness. The code-mixing is a congruent lexicalization that is well known by the patient. Furthermore, in example (9b), a patient mixed another clipped English form 'tabs' while trying to inform the doctor the kind of medicine he was earlier given by another medical practitioner which did not work for him, the full form of 'tabs' is tablets. The mixing is an alternation type well understood by the physician. Moreover, in example (9c), another patient code-mixed an English clipped form 'amoxil' while reporting to the doctor, the abortive self-prescription so far undertaken, the full form of 'amoxil' is amoxicillin. And, it is an alternation type of code-mixing equally understood by the doctor.

10. Making Prescription

This is the use of vocabularies to make recommendation of drugs, directives or advice on medication to patients by doctors. The medical doctors specifically code-mix English items into the Hausa conversation with their patients while making prescription. Some of the instances include:

- a. **Ophthalmologist:** *One point five zero (1.50) za a yi maka.*
Gloss: You will be given one point zero five (1.05).
- b. **Dentist:** *Twice a day ne wannan.*
Gloss: This is twice a day.
- c. **Physician:** *Shima daily ne five hundred milligram.*
Gloss: This is 500 milligram daily.
- d. **Dermatologist:** *Kayi wannan treatment xin.*
Gloss: You should do this treatment.

e. Paediatrician: Dole ku hau *physiotherapy*.

Gloss: You need to undergo physiotherapy.

In example (10a) above, an ophthalmologist code-mixed an English phrase ‘one point zero five’ while conversing with a patient who suffers from farsightedness not seeing a nearby objects clearly, especially reading from computer or phone, he mixed the term while recommending the type of glass appropriate for the patient. It is an alternation type of code-mixing whose semantic meaning is well understood by the patient. Similarly, a dentist in (10b), code-mixed a phrase ‘twice a day’ while directing a tooth extracting patient on how to warm his mouth specifically the area with a warm-salted water. This code-mixing is an alternation type also comprehended by the patient. In example (10c), a physician also alternated an English word and a noun phrase simultaneously in a single utterance, both in an effort to tell the patient on how go about the medicine, the mixed word is ‘daily, and the phrase is ‘five hundred milligram’ this code-mixing is an alternation type which is understood respectively. While a dermatologist in example (10d), inserted an English medical term ‘treatment’ used when advising the patient on what to do regarding his skin rashes. The code-mixing is an insertion type equally comprehended by the patient. Moreover, in example (10e), a paediatrician mixed another medical term ‘physiotherapy’ while telling the patient’s relatives what should be done for their ailing child. This code-mixing is an alternation type but not effectively understood by the patient which lead to further translation of the term into Hausa by saying ‘gashi’.

2.11 Coining a word

This refers to the creation of new vocabularies in a language. It is the process of inventing or bringing into existence the words or phrases that are not in the language before. The medical doctors and their patients mix the newly invented Hausa words and phrases in their interaction as in the following:

a. Patient: Na sha *Ragargaza-mura*.

Gloss: I took Mixagrip.

b. Pediatrician: Kuma baki siya masa *xauki-da-nihi* ba?

Gloss: And you did not buy for him a multivitamin drop?

In example (11a) above, the coined word *Ragargaza-mura* corresponding to the English name of a catarrh medicine called Mixagrip is mixed in the Hausa conversation by a patient to the physician for the fact that the patient being a villager does not know English and therefore, couldn’t know its real name, as such, as the coined word is already established in the language, then the patient used it purposely to explain his condition to the doctor. The mix of the coined word is a congruent lexicalization type whose meaning is understood by the doctor. Similarly, in example (11b), the coined nominal phrase *Xauki-da-nihi* representing Multivitamin drop for children is used by the Pediatric doctor to the mother of the ailing infant and instantly understood and responded by the mother, the reason for the mixture by the pediatrician is that, he knows well the woman considering her personality would not know the exact English name of the medicine asked by the doctor. And it is therefore, a congruent lexicalization type of code-Mixing.

12. Expressing Solace

Medical doctors use words or phrase into a language to give solace, appeasement, encouragement or consolation to the patients who are in ailment. The medical doctors code-

mix English and Hausa items in their effort to give hope to their patients as in the following examples:

- a. **Audiologist:** Yawwa! *excellent* yanzu ba matsala.
Gloss: It is excellent, there is no problem now.
- b. **Physician:** Yawwa! Naga *sugan* naki ya xan yi *low* yanzu.
Gloss: Good! I see the level of your sugar now becomes low.
- c. **Pediatrician:** Amma daman wannan *is common* ai.
Gloss: But, of course, this is common.
- d. **Physician:** Wannan ai ya fini jini ma *forty percent*.
Gloss: He has a blood much more than me, forty percent.
- e. **Physician:** *Normal* yanzu za ka iya cin komai.
Gloss: It is now normal, you can eat everything.

In example (12a), an audiologist inserted an English item ‘excellent’ to the earache patient whose ear is blocked by the earwax and therefore, came for medical review after the ear syringing. The audiologist mixed the word to console the patient and imbibe hope and, of course, the patient felt comfortable by the usage. The code-mixing is an insertion type which is understood. Furthermore, in example (12b), two English vocabularies ‘sugar’ and ‘low’ are mixed by a physician in his Hausa utterance to the female patient, the word ‘sugar’ is a partially borrowed word into Hausa used as ‘sikari’. The two terms are used at the time when the diabetic patient came for medical checkup where it is discovered that her sugar level comes down; as such, the physician used the mixed codes just to give hope to the patient. This code-mixing is a congruent lexicalization which is effectively understood by the patient. In (12c), the pediatrician inserted a verbal phrase ‘is common’ to the mother who brought her baby for medical screening for profusely oozing saliva which the mother considered as abnormality, the mixed phrase is used to give a solace and comportment to the mother. This code-mixing is an insertion type which is therefore, not well understood by the mother being a village woman. Again, in example (12d), the physician code-mixed a nominal phrase ‘forty percent’ while responding to the mother of a sickle cell patient about the level of his blood which encouraged the mother that her child blood is sufficiently enough. This mixture is alternation type whose semantic meaning is misunderstood by the mother. Similarly, in example (12e), a physician also alternated an English lexical item ‘normal’ to the diabetic patient whose sugar level now normalized, thereby bringing hope to the patient by giving him approval for eating all sort of foods. The code-mixing is a congruent lexicalization type equally perceived by the patient.

13. Making Appointment

Making appointment is concerned here with giving time for medical consultation by medical doctors to the patients. It is an act of making arrangement or schedule for meeting with patients. The medical doctors therefore, code-mix lexical items as in the following:

- a. **Physician:** *After four weeks* sai ka dawo
Gloss: You should come back after four weeks.
- b. **Audiologist:** Gaskiya ka zo jibi *Friday* in qara dubawa
Gloss: You should come back next tomorrow Friday for me to recheck.

- c. **Physician:** *Every Wednesday* muke yi.
Gloss: We are doing it every Wednesday.
- d. **Patient:** Ee, ca sukai sai *Monday*.
Gloss: Yes, they said till Monday.
- e. **Paediatrician:** Nan da *next week* idan ya yi *recovering*.
Gloss: To next week when it recovers.

In example (13a) above, the physician code-mixed a prepositional phrase ‘after four weeks’ while communicating to the patient purposely to schedule for another time of meeting, it is therefore, an alternation type of code-mixing effectively understood by the patient being enlightened. Similarly, in example (13b), an audiologist inserted another English lexical item ‘Friday’ just for appointing the ear aching patient for recheck. This code-mixing is an insertion type, though, the context only aided the patient’s understanding. Simultaneously, in example (13c), the physician mixed an English phrase ‘every Wednesday’ for giving time to the patient on how a particular medical service is undertaken. This code-mixing is an alternation type and thus, understood by the patient. Moreover, in example (13d), the patient code-mixed ‘Monday’ while reporting to the doctor on the issue of the test result said by the laboratory technician. The code-mixing is an alternation type which is acknowledged by the doctor. In example (13e), a paediatrician alternated an English phrase ‘next week’ and one vocabulary ‘recovering’ while appointing the mother of a sick child on the time for their next consultation. The second term was used purposely to imbibe hope in the mind of the ailing child’s mother. This code-mixing is an alternation type perfectly comprehended by the patient’s mother.

2.14 Emphasis

It refers to the statement of emphasis or importance on an aspect or item by medical doctors during interaction with patients. The doctors mix English lexical items into their Hausa conversation so as to emphasize on a point or something for the patients to specifically note or take care of as in the following examples:

- a. **Gynaecologist:** Akwai wannan maganin *Klovinal*, ki neme shi, kar a canja miki.
Gloss: There is this medicine Klovinal, look for it, do not let it be changed.
- b. **Dermatologist:** Akwai qaiqayi, itching?
Gloss: Is there itching?
- c. **Ophthalmologist:** Duk wani magani da za a baka *still* ba zai daina ba.
Gloss: Whatever kind of medicine you will be given, it will still persists.
- d. **Audiologist:** Kuma ya kai *limit* xin da dole sai anyi.
Gloss: And it reaches the limit that it must be flushed.
- e. **Physician:** Ku dinga ajiye *record* idan an baku.
Gloss: You should be keeping record if given to you.

In the example (14a), the English word ‘Klovinal’ as the name of a medicine is mixed by the gynaecologist with aim of emphasizing to the patient not let the patent medicine seller substitute it for the patient as commonly done whenever a specific prescribed medicine is lacking. It is an insertion type of code-mixing which is noted by the patient despite the fact

that its real meaning is unknown. Likewise, in example (14b), ‘itching’ as an English word is mixed by the dermatologist just to stress on the issue to the patient being a knowledgeable person, though, its meaning is already stated in Hausa by saying *qaiqayi*, the itching is only an English translation offered purposely for emphasis. This code-mixing is an alternation type whose meaning is well understood by the patient. Similarly, in example (14c), an ophthalmologist code-mixed an English item ‘still’ in his Hausa conversation with view of making an emphasis to the patient on the issue of taking measures and precautions against a particular illness rather than using only a medicine. And, it is an insertion type of code-mixing well comprehended by the patient. Furthermore, in example (14d), an English word ‘limit’ is inserted by an audiologist while pointing out the degree of the ear wax blockage in which the removal must be done so as to avoid hearing lost, it is an insertion type of code-mixing and therefore, comprehended by the patient being a knowledgeable. Moreover, in example (14e), ‘record’ as an English lexicon is equally mixed by the physician at the time when the patient as well, lost the earlier prescription given to him; as such, reiteration here is given by the use of the mixture which stands as an insertion type equally understood by the patient.

2.15 Making referral

Medical doctors code-mix while sending patients with special medical cases that require specific services to an appropriate medical specialist or department. The instances include the following:

- a. **Physician:** Gaskiya, dole ku je kuga *neurologist*.
Gloss: You must go and see a neurologist.
- b. **Audiologist:** Kuje akwai shi a *pharmacy*.
Gloss: Go to the pharmacy, you will get it.
- c. **Gynaecologist:** Za mu turaki *maternity* su nuna miki *practical*.
Gloss: We are to refer you to maternity for practical.
- d. **Physician:** Kai wancan *office* xin.
Gloss: Take to that office.
- e. **Physician:** Za mu yi *booking* ran *Wednesday*.
Gloss: We will book it on Tuesday.

In example (15a), a physician code-mix an English lexicon ‘neurologist’ in his Hausa interaction while making referral of the patient to the medical doctor who specializes in diseases related to nerves for an appropriate treatment. The code is notwithstanding, an alternation type which is not understood by the patient as manifested in his facial expression. While in example (15b), an audiologist mixed another medical term ‘pharmacy’ at the time when directing the patient and her relative where to procure the prescribed medicine. The audiologist used the term purposely to make referral. The code-mixing here is an alternation type, equally not understood by the patient and her relative until when further explanation was made by the audiologist. Similarly, in example (15c), a gynaecologist code-mixed two English terms which are: ‘maternity’ and ‘practical’. The terms are used in the course of making referral to where a specific medical exercise called ‘kegal’ should be undertaken by the patient. This code-mixing is an alternation type whose meaning is perfectly understood by the patient as he is an enlightened having western education. Moreover, in example (15d), a physician inserted an ‘office’ while commanding a patient to take his file to another office

where his ailment is going to be examined and treated. The patient in this instance acted, signifying that he understood the use of the word as it is a congruent lexicalization. Also, in example (1e), the physician mixed two English words ‘booking’ and ‘Wednesday’ in a single utterance with view of making arrangement for further medical referral and consultation with another medical specialist. The code-mixing is an alternation type duly comprehended by the patient.

3.0 Conclusion/ Concluding Remarks

This research work demonstrates the practical existence of Code-mixing in Rasheed Shekoni Teaching hospital. It examines the actual occurrence and conduct of the phenomenon used in the hospital in which the doctors’ and patients’ utterances containing instances of code-mixing of English lexical items into Hausa as the main indigenous language were predominantly examined. It also proved that, the act of Code-mixing is unavoidably carried out in the hospital by both medical doctors and their patients who came for medical consultation; the study discovers and analyzes fifteen (15) linguistic aspects as the reasons for code-mixing which sometimes renders the consultation negative, faulty or deficient which are: lack of equivalence, abbreviation, show of identity, euphemism, calling attention, making explanation, expressing sympathy, borrowing, clipping, making prescription, coining a word, expressing solace, making appointment, emphasis as well as making referral respectively. The study furthermore, proves that, the three basic types of Code-mixing are primarily used by the seven (7) category of medical doctors including their patients throughout as manifested in the overall examples.

Recommendations

- Medical doctors should particularly avoid code-mixing English lexical items while interacting with patients.
- Patients should also avoid code-mixing other dialects or none-standard Hausa vocabularies while communicating with medical doctor.
- Medical terms that lack Hausa equivalents should be translated by the professional body of translators.

References

- Abu-karooz, H. et al (2019). Code-switching and code-mixing: A Sociolinguistic Study of Senegalese International Students in Iraqi Colleges; University of Kufa: Iraqi
- Auer, P. (1984). *Bilingual Conversation*. Amsterdam: John Benjamins.
- Bhatia, T. K., & Ritchie, W. C. (2004). Social and psychological factors in language mixing. In W. C. Ritchie and T. K. Bhatia (eds.), *Handbook of Bilingualism* (pp.336-352). Malden: Blackwell Publishing.
- Chloros, P. (2009). Language Selection in Three Strasbourg Departmental Store, *International Journal of Linguistics*, 10(5): 421-440.
- Clyne, M. (2003). *Dynamics of Language Contact. English and Immigrant Languages*. Cambridge: CUP

- Dinillah, T. H. (2018). Sociolinguistics Code: Code-Switching and Code-Mixing. *Journal Ilmiah Kependidikan*, Vol. 11 Institute Agama Islam Negeri (IAIN), Metro.
- Fasold, R. (1996). *The Sociolinguistic of Society*. Oxford: Blackwell Publisher.
- Fasold, R. (1984). *The Sociolinguistics of Society*. Oxford, UK: Blackwell.
- Gumperz, J. J. (1982). *Discourse strategies*. Cambridge: Cambridge University Press
- Halliday, M.A.K. (1978). *Language as Social Semiotic: The Social Interpretation of Language and Meaning*. London: Edward Arnold Publishing.
- Hoffman, C. (1991). *An Introduction to Bilingualism*. New York: Longman.
- Hudson, R.A. (1996). *Sociolinguistics*. (Second Edition) London, Cambridge University Press.
- Hudson, R. A. (1980). ***Sociolinguistics***. Cambridge, Cambridge University Press.
- Hymes, D. (1977). Models of the interaction of language and social settings. *Journal of Social Issues*, 23(2), 8-28.
- Labov, W. (1972). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Meyerhoff, M. (2006). *Introducing Sociolinguistics*. Routledge: New York.
- Muysken, P. (2000). *Bilingual Speech. A Typology of Code-Mixing*. Oxford: Cambridge University Press.
- Poplack, J. (1980). Sometimes I'll start a Sentence in English Y Termino en espanol: toward a typology of code-switching. *Linguistics*, 18, 581-616.
- Siregar, B. U. (1996). *Code Alternation in Bilingual Speech Behaviour*. USU: Medan.
- Suwito, S. (1985). *Pengantar Awal Sociolinguistic: Teoridan Problem*. Surakarta: Henary.
- Trudgill, P. (1986). *Dialects in Contact*. Oxford: Blackwell
- Wardhaugh, T. (1998). *An Introduction to Sociolinguistics* (3rd ed.). Massachutes: Blackwell Publishers.