

Language and Neuropsychiatric Disorders: An Analysis of Communication among Trilingual Schizophrenics in Nakuru Level Five Hospital in Nakuru County, Kenya

Joseph Maina¹, Eliud K. Kirigia²; James Ogola Onyango³

^{1,2,3} Laikipia University, Kenya

Email address: mainajosef@gmail.com

Abstract

The main objective of this study was to describe the thought disturbance manifestation in code-switching patterns of trilingual schizophrenics in Nakuru Level Five Hospital. Schizophrenia is a grievous and chronic mental disorder that affects the way a person thinks, behaves and feels. Schizophrenia victims may appear like they have lost touch with reality. Sometimes these patients seem perfectly fine until they talk about what they are really thinking. They may not make sense when they talk. The symptoms can be observed directly in their language, most importantly, disorganized language. Disorganized language is a spoken language that fails to communicate effectively or follow a coherent discourse plan. It is a manifestation of positive formal thought disorder, or it reflects an underlying impairment of verbal thought. The diagnosis of schizophrenia relies entirely on language. A purposive sample of six respondents consisting of three females and three males of diverse age groups was investigated. Using a phenomenological qualitative research design, data was collected, compiled, described and analyzed underpinned by the un-Cartesian Linguistic Theory and the Multilingual Production Model. The main instrument of data collection was Thematic Apperception Test, open-ended interviews, audio recording and observation. Results from this study indicate that trilingual schizophrenics manifest illogical triadic code switch patterns involving mother tongue, Kiswahili and English resulting in a deviant language in code-switching patterns. This study will benefit scholars in linguistics, medical practitioners and the general public.

Key Terms: Triadic code-switching, disorganized language, hallucinations, delusions

How to cite this article in APA (6th Edition)

Maina, J., Kirigia, E.K.; Ogola, J. O. (2019). Language and neuropsychiatric disorders: An analysis of communication among trilingual schizophrenics in Nakuru level-five hospital in Nakuru County, Kenya. *Editon Cons. J. Media Commun. Stud.*, 1(3), 52-60.

Introduction

Language, as a concept, is often treated as synonymous with communication or logical thought. Communication and the transmission of intelligible meaning are values perceived in language and assigned to language. Human beings exchange messages via communication. This is made possible because of the existence of language. People use language to express their thoughts, ideas, needs and feelings. As a result, language holds an important role in the conversation, such as to transfer many kinds of information. The language a person speaks affects, to some extent, what he or she has in his or her mind (Rosenthal, 1991). Thus, it is clear that things inside someone's mind and the language he or she speaks cannot be separated from each other. In fact, the existence of language which expresses thought would be impossible without the ability of each individual to elaborate the mental functioning in his or her mind.

Mental illness can affect the lives of people in the world. It may break the sufferer's mental health condition, and it also influences his or her language production and processing. Furthermore, it cannot be diagnosed by biological tests, such as viewing a virus under the microscope. In many cases, this kind of disorder arises from the physical occurrence in the brain caused by psychological and environmental factors. Andreasen (2001) states that mental illness can affect someone's abilities like remembering, thinking, conversing and feeling. In this case, these disturbances in his or her mind may risk the capacity of his or her mind in language processing. One such mental illness is schizophrenia.

LITERATURE REVIEW

According to Deese (1984), the abilities of a person to express his or her thought correctly, think clearly, to solve problems in life and also communicate well with others depend on his or her own condition of mind. Basically, a person with a good mental condition of the mind may not

have difficulty in processing utterances since the messages transferred easily to other people. Franc and Muir (1996) state that to process utterances may become the most difficult thing for a person with a mental disorder because there are disturbances of bad cells or neural impairment in his or her mind. Thus, a person often gets trouble in expressing his or her moods, feelings of emotion, and even he or she sometimes has to face difficulties in uttering his or her words correctly.

Thompson (2007) states that schizophrenic disorder is one of the mental disorders identified by the American Psychiatric Diagnostic and Statistical Manual of Mental Disorder (DSMV). Veague, Kane, Colins and Levitt (2007) states that schizophrenia belongs to a psychotic disorder that disrupts thought, speech and behaviour. Thus, a person with schizophrenia is disorganized in his or her way of thinking, which influences his or her behaviour. Thompson (2007) asserts that psychotic symptoms are primarily characterized by hallucinations, delusions and disorganized speech patterns. Hallucinations mean that things seen, heard and felt are not actually received while delusions include false beliefs, having a misinterpretation of reality.

Paradis (2004) study on multilingualism and neuropsychiatric disorders explains the use and relative importance of the five neurofunctional mechanisms engaged in verbal communication: implicit linguistic competence, metalinguistic knowledge, pragmatics, emotion and thought. Multilingualism profoundly impacts psychiatric diagnosis and psychotherapy because language is the primary tool of both processes (Bamford, 1991). Language competence varies with the patient's level of psychosis (Toppelberg, 1996). It was evident in this study that the trilingual schizophrenics were capable of expressing themselves in the three languages they are conversant with albeit with some minimum challenges. Personal events recalled in the language of the actual

experience show different content organization and detail and are more vivid than when the same event is recollected in the other language (Javier, Barroso & Munoz, 1993). The processing of three linguistic codes may impact on the extent and the degree to which memories and associations can be expressed depending on the language used (Javier, 1989). Research on multilingualism has frequently shown that different languages are linked with different ways of thinking and feeling, as well as different attitudes and ways of expressing one's feelings and relating to other people (Wierzbicka, 2004).

METHODOLOGY

The respondents consisted of 6 participants with chronic schizophrenia recruited in the psychiatric ward of Nakuru Level Five Hospital. Diagnostic classification of schizophrenia was determined by the treating psychiatrist, following DSM-V in the chronic stage of the disease. The inclusion criteria included a positive diagnosis of schizophrenia (hallucinations and delusions); patients undergoing treatment in the facility; patients aged between 18 and 45 years; and absence of associated pathologies (a mental deficiency, dependence on alcohol, drugs and organic disorders). Using Thematic Apperception Test cards and open-ended interviews, the researcher elicited data on the manifestation of thought disturbance in language patterns of the trilingual schizophrenics. All the interactions with each participant were done in the Medical Officer's office within the psychiatric ward. A table was arranged, and two chairs and the digital audio recorder were set on the table. The participants were given the following instructions: 'You are going to participate in an experiment about communication and the use of language and the interaction will be recorded'. The audio-recorded interviews were later analyzed using the Multilingual Production Model to identify the patterns of code-switching in the trilingual schizophrenic in Nakuru Level Five Hospital.

RESULTS AND DISCUSSION

The trilingual schizophrenics manifested local culture-based thought disturbances and delusions in illogical triadic code switch patterns involving Mother Tongue, Kiswahili and English with unpredictable distortions in comprehension based on unpredictable sequences in the three languages. In response to the objective of this study which was a description of the patterns of code-switching among trilingual schizophrenics in Nakuru Level Five Hospital, data obtained from Thematic Apperception Tests reveal the following broad types of patterns: a) Intersentential switching, b) Intracentential switching, c) Tag switching, and d) Intra-word switching.

According to Poplack (1980), intersentential switching involves a switch at a clause or sentence boundary where each clause or sentence is in one language or another. Intra-sentential switching is whereby switching of different kinds occurs within the clause or sentence boundary. Tag switching constitutes switching of either a tag or a word or both from one language to another while intra-word switching occurs within a word itself.

Intersentential Switching

This study's results indicate that there were intersentential code switches in a single piece of discourse among the six respondents. Intersentential code-switching occurred in situations where respondent alternated codes or language in a single discourse. In this case, it was noted that the respondents would start in one language then move to another language and occasionally end in another. This collaborates findings by Appel and Muysken (1987) that the most frequent function of code-switching is to refer to concepts, ideas, phenomena situations, interactions that speakers have to deal with in L2, or culture-specific concept and realia that cannot be referred to L1, therefore resulting into an expression of the concept with a word or phrase from L2. The excerpts to illustrate the switches were obtained from the Thematic Apperception Test.

Notably, for ease of identification, the mother tongue language is emboldened, Kiswahili language is emboldened and italicized, and the English language is italicized and the turns uppercase bold.

We observed the following six excerpts of intersentential code-switching instances:

Kalenjin – English Pattern

INTERVIEWER: Yes, he is looking at us. What makes you think it's a man?

CHEPS*: (Looking keenly) **Tindo chito kinmotet** (The man has strength). He ran away yesterday.

The TAT picture shown to the respondent (Cheps*) had drawings of a person looking at him/herself in a mirror on a dressing table. The picture is meant to elicit a response from Cheps*. The respondent starts off using a Kalenjin clause '**Tindo chito kinmotet** (the man has strength) followed by an English sentence 'He will be arrested.' There is a deviance in the thought process in this particular switch since there is an elaboration of irrelevant details since there is a disconnection between the first sentence (in Kalenjin) and the subsequent clause (in English) in that there is no logical reason to arrest anybody on account of their strength unless in the mind of the respondent strength is a crime.

English – Kiswahili Pattern

INTERVIEWER: Tell me what this lady in the picture is holding in her hand?

WASTELLA*: It's a good picture. **Alikasirika akampee chapaa** (He got furious and gave him/her money (slang)).

Wastella* was required to respond to the TAT picture with a woman looking down from a balcony holding a book. She responds using an English statement (It's a good picture) then switches to a Kiswahili clause '**Alikasirika akampee chapaa**' (He got furious and gave him/her money). **Chapaa**

is slang for money. We note the switch from an English clause to a Kiswahili clause is indicative of loss of goal - the subject lost track of the thread of discourse without outside interruption. It is apparent that Wastella's* thoughts are unrelated since there is a loose association of the ideas she is putting across as a response to the interviewer's question.

Kiswahili – Luhya Pattern

INTERVIEWER: True, the lady has a book in her hands. Anything else about the lady?

NAFULA*: **Wanawake wachana** (Women leave) (Pointing at a fly on the windowpane) **nzi** (flies). **Yakusimbwa!** (He/she was betrayed!)

In this interaction, Nafula* was required to give a response to the TAT picture (used above with Wastella*). Nafula* begins with a Kiswahili statement, '**Wanawake wachana... nzi**' (Women leave ...the flies) then switches to a Luhya clause '**Yakusimbwa!** (He was betrayed). In this particular case, the deviancy of the Kiswahili – Luhya intersentential switching results from the derailment. The fly on the windowpane derailed the subject, thereby interfering with the flow of the discussion from women to someone being betrayed. The apparent switching from Kiswahili to Luhya brings out the disconnection in the flow of thought of the respondent.

Kamba – English – Kiswahili Pattern

INTERVIEWER: Yes, can you tell me what the man is doing?

WAKANESA*: **Nunamwonie, tiwo?** (You saw him, isn't it?) Stop joking! **Atakupiga**

makofi mingi sana (He/she will give you many slaps).

In the above excerpt, the respondent was shown a Thematic Apperception Test card with a picture of a stalled car with the bonnet open and a man checking at the engine. The respondent starts with a Kamba statement followed by a question tag '**Nunamwonie, tiwo**' (You saw him, isn't it?), switches to an English exclamative 'Stop

joking!’ and then to a Kiswahili clause **‘Atakupiga makofi mingi sana’** (He/she will give you many slaps.). The three clauses (Kamba – English – Kiswahili) are totally disconnected in as far as the flow of thoughts is concerned. The pressure of speech makes the discourse to be disconnected, and the subject difficult to be understood as a new topic is vigorously set in by the respondent.

Dholuo – Kiswahili Pattern

INTERVIEWER: *What could have made this boy sad?*

OTIS*: **Dum maloobiro!** (Jump it’s coming!). (Shouting) **Mjinga kabisa!** (You are very stupid).

Otis* is required to answer the interviewer in reference to a TAT picture with a boy seated reading a book with a presumably forlorn expression on his face. The respondent begins with a Dholuo exclamative **‘Dum maloobiro’** (Jump it’s coming) meant to be a warning to the interviewer to take caution as something was coming and he had better jump so that it does not hit him. When the interviewer does not jump the respondent switches to a Kiswahili imperative **‘Mjinga sana!’** (You’re very stupid!). There is deviancy in this switching since there is a loosening of association. The Dholuo statement is not in any way related to the inappropriate utterance in Kiswahili.

English – Kiswahili – Ekegusii Pattern

INTERVIEWER: *Did he actually report what has happened in this picture?*

MOGAKA*: *That’s why. Wacha waseme* (Let them say). **Tenena boroqe** (Stand firm/straight).

In the above extract, the respondent (Mogaka*) is required to respond to a TAT card picture with a picture of a man suspending himself using a strong rope. The respondent started with an English clause *‘That’s why’* followed by a Kiswahili clause **‘Wacha waseme’** (Let them say) and finished with an Ekegusii sentence **‘Tenena boroqe’** (Stand firm straight). The deviancy, in this case, results from

tangentiality - the respondent elaborated on irrelevant details (the three statements are not in any way related).

Intrasentential code-switching

In this study, intrasentential code-switching occurred when the respondent’s shift was done in the middle of a sentence, with no interruptions, hesitations, pauses to indicate a shift. We observed the following five excerpts in the current study:

English – Ekegusii– English – Ekegusii – Kiswahili Pattern

INTERVIEWER: *Yes, can I request you to tell me what is happening in this picture?*

MOGAKA*: *Yeah, picture erie yaigoro encho* (of yesterday come) **Tuesday inche nkorera** (me crying) **kabisa** (very much).

Mogaka* is requested to respond to a TAT card with a picture of a man walking away dejectedly from a woman lying on a bed in the background. In the interaction above, the respondent begins with an English affirmative phrase *‘Yeah, picture’* – a direct response to the interviewer’s subject then switches to Ekegusii phrase **‘erie yaigoro encho** (of yesterday come), then to an English word *‘Tuesday’* retracts back to Ekegusii phrase **‘inche nkorera’** (me crying) and finally to a Kiswahili word **‘kabisa’** (very much). The loss of goal in the sentence makes the sentence devoid of cohesion and thus resulting in the deviancy in the statement.

Dholuo – Kiswahili Pattern

INTERVIEWER: *The men in the picture seem to be quarrelling, what could be the reason?*

OTIS*: **No nango** (He licked) **saa tatu usiku** (at nine o’clock).

Otis* response begins with a Dholuo **‘No nango’** (He licked) then switches to a Kiswahili adverbial phrase **‘Saa tatu usiku’** (At nine o’clock) in relation to a TAT card with a picture of two men who appear to be quarrelling. The juxtaposition of the two codes (Dholuo and Kiswahili)

coupled with a loss of goal makes the sentence to be meaningless.

English – Kamba – Kiswahili Pattern

INTERVIEWER: *What time of the day is it?*

WAKANESA*: *Passengers imwe kwa imwe (one by one) wakapotelea (they got lost) Canaan.*

Wakanesa* is responding to the interviewer's question in reference to a TAT card bearing a picture of a woman carrying a basket walking by a house at dusk. The respondent first phrase is an English noun phrase 'Passenger' then a switch to the Kamba phrase 'imwe kwa imwe' (one by one). A Kiswahili verbal phrase 'wakapotelea' (got lost) follows and lastly the English adverbial phrase 'Canaan'. The presentation of diverse and unrelated information in the switches makes it difficult to be comprehended.

Gikuyu – English Pattern

INTERVIEWER: *Where is the woman going?*

WASTELLA*: *Maracoka (They will return) maybe evening heh, heh heh.*

Upon being asked a question by the interviewer in response to a TAT card with a picture of a woman carrying a heavy load on her head and holding two children, one on each of her arms. The respondent (Wastella*) begins with a Gikuyu phrase 'Maracoka (They will return)' then switches to an English phrase 'maybe evening'. The Gikuyu phrase is not answering the interviewer's question since it is about 'returning' yet the question was about 'going'. The lack of cohesion and circumstantiality in this interaction makes the statement incomprehensible.

Kalenjin–Kiswahili – English – Kiswahili – English – Kiswahili Pattern

INTERVIEWER: *What do you think the man in the picture is telling the lady?*

CHEPS*: *Mongen ane (I don't know), alisimama na (he stood with) bottle-tops na*

akasoma (and read) bible verses zote (all).

The respondent's answer is sought in reference to a TAT card with the picture of a man seated astride a motorcycle talking to a lady standing on a pavement. Cheps* starts with a Kalenjin negation phrase 'Mongen ane' (I don't know) then switches to a Kiswahili phrase 'alisimama na' (he stood with), switches to an English phrase 'bottle-tops' and again back to a Kiswahili phrase 'na akasoma' (and he read), shifting again to an English noun phrase 'bible verses' before reverting back to a Kiswahili adjective 'zote' (all). The apparent elaboration of irrelevant details by the respondent makes it difficult to comprehend what she is talking about.

Tag switching

According to Hammers and Blanc (2000), tag switching occurs easily for the simple reason that tags contain minimal syntactic restriction; thus, they do not break syntactic rules when inserted into a sentence. Tag switching was evidently a practice among the subjects as can be illustrated by the six tag switches discussed below:

Kamba – Kiswahili Pattern

INTERVIEWER: *This is a card that has some picture....*

WAKANESA*: *It's good, eh. For men (using a finger to indicate four)*

INTERVIEWER: *What are these four men doing in this picture?*

WAKANESA*: *Nunamwonie, tiwo? (You saw him, isn't it?) Sindiyo? (Isn't it?)*

The respondent (Wakanesa*) is giving a response to a TAT card with a picture of four men playing a game of cards. In response, Wakanesa* answers the question from the interviewer by posing a tag question in Kamba 'Nunamwonie, tiwo?' (You saw him, isn't it?) then switches to the Kiswahili tag 'sindiyo?' (Isn't it?). Though the Kamba question tag and the subsequent repetition in Kiswahili are

correct, there is disharmony in the response since it did not answer what the interviewer asked.

English – Luhya Pattern

INTERVIEWER: *What is happening in this picture?*

NAFULA*: *It's a mother and child? Ni nyina yende omwana?* (It's mother and child)

Nafula* is responding to a TAT card showing a woman shouting and a boy riding a bicycle had been knocked down by a vehicle. In the above interaction, the respondent uses an English phrase '*It's mother and child?*' which is tag switched to Luhya '*Ni nyina yende omwana*' meaning '*It's mother and child?*' The tag switching is inconsistent for it does not in any way serve any purpose making it an unwarranted repetition.

English – Gikuyu – Kiswahili Pattern

INTERVIEWER: *Can you tell me what these men and women are doing?*

WASTELLA*: *Eh... (Meditatively)...tomorrow... Rocio (tomorrow)... kesho (tomorrow) for sure!*

In the case above, the respondent's is responding to a TAT picture bearing men working in a field as the women looked on. The respondent used two tag switches at the same time. She mentioned the English word '*tomorrow*' which is tag switched in both Gikuyu '*rocio*' (tomorrow) and Kiswahili '*kesho*' (tomorrow). The unnecessary repetition here short of serving the purpose of emphasis, which is rather remote from the respondent's perspective, is devoid of any meaning.

Dholuo – Kiswahili Pattern

INTERVIEWER: *What are these men doing?*

OTIS*: *Rachainya! (Very wrong) Mbaya kabisa! (Very wrong!)*

The question from the interviewer is in reference to a TAT card with a picture of five men - two seated while one is on the floor having been hit by another one and the last man

is protecting the fallen man from further attack by his adversary. Otis* responded in Dholuo '*Rachainya*' (very wrong) and echoed the tag in Kiswahili '*Mbaya kabisa*' (Very wrong). The deviancy in this tag switching first comes from its misplacement – the Dholuo tag does not answer the interviewer's question 'what' but instead focuses on 'how'. The subsequent Kiswahili tag just adds on the initial 'what' tag making it an irrelevant response.

Intra-word Code Switching

Intra-word code-switching is generally the mixing of two or more languages within a single word. Grimstad, Lohndal and Afarli (2014) assert that word switching occurs at morpheme boundaries. In the current study, intra-word code-switching was observed when respondents mixed two languages within a single word as the six excerpts below illustrates.

Kiswahili – English Pattern

INTERVIEWER: *There is a horse and hills in the background. What are the women doing?*

WAKANESA*: *Hakuna (There is no) kuworry... .. tutafeel mawinter mawinter.*

Wakanesa* is required to respond to a TAT card with a picture of horses in the foreground and women in the background digging. The respondent in the above interaction says *Hakuna* (there is no) *kuworry*, the Kiswahili morpheme '*ku*' (to) is conjoined to the English word '*worry*'. The coherence of the Kiswahili morpheme '*ku*' reveals the ease by which the two languages can easily be code switched within a single word. In the same extract, we have another intra-word in the respondent's speech when he says '*Tutafeel mawinter mawinter*'. '*Tutafeel*' is an intra-word consisting of the Kiswahili morpheme '*Tuka*' (we) and the English morpheme '*feel*'. Thereafter, '*mawinter*' is another intra-word bearing a Kiswahili morpheme '*ma*' and the English morpheme '*winter*' – this intra-word code-switching used in this context consists of

glossomania (non-existence words) which make the respondent difficult to be understood.

Luhya – Kiswahili Pattern

INTERVIEWER: *The man seated is playing a musical instrument. Which instrument is it?*

NAFULA*: *Ekhubolranga* (I'm telling you) **iredio** (**radio**) **yakora** (got lost) **kabisa!** (completely)

In this particular case, Nafula* is expected to give a response to a TAT card picture with a man playing a musical instrument while another man is dancing to the tune. The intra word '**iredio**' has two morphemes – the Luhya morpheme '**i**' which represent an article (either the indefinite article 'a' or the definite article 'the' and the Kiswahili morpheme '**redio**'. We note that though the respondent can aptly use the intra-word singly when linked with other words in the sentence, it fails to bring any sense.

Gikuyu – English Pattern

INTERVIEWER: *What might have caused the car to break down?*

WASTELLA*: **Nikorewind**. (He/she is rewinding).

Wastella* was responding to a TAT card with a picture of a car that has stalled and the driver has opened its bonnet to examine the mechanical fault. The intra-word '**Nikorewind**' consists of a Gikuyu morpheme '**Niko**' (in the process of doing something) and the English morpheme '**rewind**' (to make a recording go back to the beginning). The respondent apparently uses an intra-word to lessen the chance of giving an elaborate explanation about what has been asked – poverty of speech – and in so doing fails to give an elaborate answer to the question posed by the interviewer.

Kalenjin – English – Kalenjin Pattern

An interesting intra-word code-switching (Kalenjin – English – Kalenjin) was observed as in the excerpt below:

INTERVIEWER: *What are the two men doing on the dais?*

CHEPS*: **Obwan kesupporten tugul** (Come all we support). The TAT card with a picture of two men shaking hand on a dais in the presence of a crowd of people is shown to Cheps* so that she can respond. The intra word code-switching is '**kesupporten**'. This is a hybrid word with a Kalenjin prefix '**ke**' which is an empty morpheme which is supposed to give meaning to the morpheme that follows – in this case, the English morpheme '**support**' (give assistance to) – and the suffix '**en**' which is another empty morpheme meant to make the verb complete. Cheps* aptly uses the intra-word code-switching, but due to losing the thread of discourse it becomes difficult to understand what she is talking about.

CONCLUSION AND RECOMMENDATIONS

The study's findings clearly indicate that patterns of code-switching are arbitrary and not guided by any formula in trilingual schizophrenics resulting in mumbo jumbo order sometimes deficient of any logical considerations. Research on other linguistic aspects (like phonology, phonetics, morphology and lexis) involving trilingual schizophrenics might present interesting reading. A comparative study of the language of trilingual schizophrenics and trilingual aphasic patients could inform more knowledge of formal thought disorder in the language of the two groups.

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