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A Health Education Video in an Indigenous Nigerian Language to Dispel Misconceptions Associated with Reversal of Eruption Sequence of Anterior Teeth

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ABSTRACT

Research findings conducted in Nigeria have revealed grave misconceptions regarding eruption of maxillary anterior teeth before the mandibular ones in children as affected individuals are believed to be evil, carriers of misfortune and their families are deemed cursed. Such children are stigmatized, abandoned and may be gotten rid of. A twenty three minute culturally appropriate video in the Yoruba language titled “Baba Yoyin” (meaning male tooth extractor -traditional dentist) was developed to demystify the Nigerian community about misconceptions associated with reversal of eruption sequence of teeth and educate them about hazards associated with patronizing traditional dentists and the need to visit a dentist/doctor for advice. In the pre -production stage, the video was designed and planned and the cast , crew and appropriate locations for shooting the film shooting were selected . In the production stage, filming was done with several wide, medium and close shots. At post production, the film was edited with a sound mix comprising of sound effects and music. Computer graphic effects were added digitally. This video was produced in Yoruba, an indigenous Nigerian language to serve as a culturally appropriate community dental health education tool targeting nursing mothers, pregnant women, and traditional birth attendants from the lower social class in south western Nigeria. The storyline in this video tape will be translated into Igbo and Hausa , the two other major Nigerian languages. This videotape can be repeated in other African settings whose societies experience similar misconceptions about tooth eruption.

Keywords: *Reversal of eruption sequence, child, health education, video*

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INTRODUCTION

Many nations of the world especially nations in Africa, have rich cultural heritages with tribes having their own traditional beliefs and myths about various phenomena. Strong myths have often pervaded African societies leading to unpleasant social experiences (Cimpric, 2010). One of such is erupting the upper teeth before the lower ones.

It is the norm that the mandibular central incisors should erupt before the mandibular ones among majority of children (Choi and Yang 2001; Gupta et al, 2007; GunaShekhar and Tenny 2010). However, Aderinokun and Oyejide 1991, and Denloye et al, 2012 have documented that a reversal of this sequence sometimes occur and is unacceptable in some cultures. For example, among the Indians (Bhatt and

Bhargava 2006) and Punjabis (Dosanjh and Ghuman 1996) children who erupt maxillary teeth before mandibular ones are viewed with disdain. African ethnographic reports have revealed that children who cut their upper teeth before the lowers have been killed because of their supposed “developmental anomalies” (Hill and Ball 1996) . In southern Ethiopia, among the Omotic speaking Karo, and Hamar tribes some people still secretly declare such children mingi as they are believed to exert evil influences on others (Mingi, Wikipedia). Among the Baribas in Benin republic, reversal of the eruption sequence in the child determines if a child possesses witchcraft (Sargent, 1989). The Wasawahili and the Zanzibar Arabs (Frazer, 2009), Marakwet of Kenya (Kipkorir and Welbourn 2008) and Kabompo in Zambia (Coe and

Greenall 2003), have at times viewed such children as a bad omen.

In Nigeria, the Igbo of Eastern Nigeria (Uchegbue, 2010) and Yoruba in South Western Nigeria (Aderinokun and Oyejide 1991) believe that they are carriers of misfortune. Furthermore, affected children in the Yoruba society are derogatorily referred to as “*omo eleyin oke*” meaning “children with upper teeth”. They are often looked down on, harassed and stigmatized as they are believed to possess “*ase*” meaning spiritual authority. It is believed that they have powers to invoke evil irrevocable pronouncements on people and for this reason the whole community is scared of them and they are avoided. Aderinokun and Oyejide 1991, in their study on eruption sequence among Yoruba rural dwellers in southwestern Nigeria revealed that 70.4% of the community members regarded eruption of upper incisors before the lowers as a sign of an evil child while 55.2% of them were of the opinion that such teeth should be immediately extracted after which ritual sacrifices should be performed. Reports by Bankole et al, 2013 in Nigeria revealed that some health care workers believed the misconception. Over a fifth (29.4%) of Traditional Birth Assistants in Nigeria will be astonished at seeing such children (21.1%) felt the condition was due to evil spirits and (61.3%) will advise parents to hide /get rid of such children. Premature extraction of these teeth is carried out by traditional dentists and it exposes the child to future malocclusion, unnecessary pain and infections such Human Immuno deficiency Virus infection, hepatitis B infection and tetanus. Furthermore, affected children are abandoned and the family faces ostracization by community members. Aderinokun and Oyejide 1991 have stated that these societal reactions will have great traumatic impact on the child’s psychosocial wellbeing. For this reason, it is pertinent that health education strategies should be targeted at the community members and rural health care workers.

In Nigeria, several oral health programmes have been conducted among the populace regarding tooth eruption in infants (Lawal et al, 2013) but misconceptions about the eruption sequence still persist probably because this information is not retained and do not have an impact. Videotapes are useful health educational tools used in many countries to propagate messages across to the populace (Alsada et al, 2005; Chalmers et al, 2005) This may be due to the fact that what is seen is retained better, having a lasting impression on the target population (Cohen et al 2009). In addition, according to Fleming et al 2009, videotapes demonstrate procedures and concepts that may be difficult to explain or describe in print. Information from videotapes are presented in a visually stimulating and consistent manner to large audience. Wong et al, 2006 stated that the audience can accept and process information conveyed in a videotape if it is culturally acceptable. Culturally acceptable videotapes present information in a language, diction, character and scenery that is acceptable to the audience. Therefore, people are usually more captivated with health promotion messages grounded in stories set in their cultural context (Mathews et al, 2002). Africans like information that are dramatized and expressed because the information conveyed will be appealing to get their attention.

There appears to be no prior documentation on a culturally appropriate videotape on reversal of the eruption sequence of anterior teeth in an indigenous language in Nigeria.

Background

Research findings in Nigeria revealed grave misconceptions regarding eruption of maxillary anterior teeth before mandibular. To change this misconception, and based this, a twenty-three-minute, six scene video titled *Baba Yoyin* in the Yoruba language was developed. *Baba Yoyin* means male tooth extractor (traditional dentist). The purpose of the video was to demystify misconceptions associated with reversal of eruption sequence of teeth in the Yoruba community and to educate the public that children who erupt their upper teeth before the lower teeth are not evil, nor carriers of misfortune, and their families are not cursed. Furthermore, to inform the public that such children should not be stigmatized, abandoned, despised, hidden or gotten rid of and also the right place to seek consultation in such situations and the hazards associated with patronizing traditional dentists.

Nigerians love entertainment and spend hours watching home videos and movies on digital television. The majority of films purchased are pirated, cheap and easily afforded by community members. In recent years, digital satellite television come with cheaper and more affordable bouquets featuring indigenous films, thereby increasing accessibility to the populace. Therefore, the authors thought it is wise to leverage on this film watching habit by developing a culturally appropriate video in the Yoruba language as a health education tool to change their wrong beliefs regarding reversal of eruption sequence of teeth. The Yoruba language is the local language spoken in south western Nigeria. The video was targeted for adults particularly from the lower social class and health care workers (Traditional birth attendants, community health officers and nurses) working in the suburban and rural areas.

This paper documents the development of the video and the process that went into the finished work.

The storyline

In the first scene, a woman called *Mama Bolu* living in the village and nursing a ten-month-old baby (*Bolu*) was told to move out of her matrimonial home by her mother-in-law who claimed that misfortune has befallen the family because *Bolu*, the baby erupted upper incisors before the lower counterparts. *Mama Bolu’s* mother-in-law strongly believed that *Bolu* is an evil child who will invoke disaster to the family. Distraught and crying *Mama Bolu* returns to her parent’s home with her child.

The second scene shows *Mama Bolu’s* mother complaining that her business has plummeted attributing the misfortune to *Bolu*. *Bolu’s* mother was troubled as her mother was unhappy with her. She faced a lot of discrimination as no one interacted with her, bought wares from her shop in the local market because they believed that her son *Bolu* will invoke calamity on them. She was very unhappy and distressed.

In the third scene the stigma and isolation became unbearable for *Mama Bolu*. When *Bolus* father heard about the unbearable stigmatization, he secretly took *Bolu* to an old man called *Baba Yoyin* (the tooth extractor) a traditional dentist who forcefully removed *Bolu's* upper teeth. The tooth extraction process developed life threatening complications. *Baba Yoyin* was arrested, charged to court and was later imprisoned for his atrocities.

The fourth scene shows *Bolu* who seven years after suffered stigmatization and isolation because community members and peers are scared of him. They discriminated against him and did not interact with him because they believed he possessed supernatural powers and any curse he places on anyone is irrevocable.

The fifth scene shows the traditional head of *Mama Bolu's* village called *Baale* who was visibly unhappy when he heard of the discrimination and isolation experienced by *Mama Bolu*. The *Baale* decided to invite a dentist from the town to educate his subjects and the community about tooth eruption.

In the sixth scene the dentist on arrival from the city goes to the *Baales* palace. The *Baale* send a town crier to invite members of the community to the palace where the dentist educated them on teeth eruption. The dentist highlighted that erupting upper teeth before the lower counterparts is not evil. Therefore, any child who does so is not an evil child and is not a bearer of misfortune. In addition, the child does not possess supernatural evil powers and is not a witch. The dentist mentioned the effects of this misconception on the child and the hazards of patronizing traditional dentists.

Development of the videotape

An idea about discouraging cultural myths among the local populace regarding reversal of tooth eruption sequence was initiated by one of the authors who built it into a practicable script. With imputes from other authors, an underlying message to address misconceptions of reversal of eruption sequence was identified and a story about a child called *Bolu* who had erupted his upper anterior teeth before the lowers was developed. A synopsis was prepared and this was followed by a step by step outline which broke the story into several scenes. To guarantee that the message was delivered in a fascinating and enjoyable manner the service of a professional scriptwriter was sought to write the screenplay. The screen play was redrafted and modified several times to reduce ambiguity and improve dramatization, organization, character, discourse and the general style.

In the pre-production stage, the video was designed and planned. The authors employed an experienced indigenous film producer and the cast and crew were selected. Casts were selected for age, appearance and personality. Appropriate locations for shooting the film shooting were identified and selected by the film producer. The selected location was at *Amuloko* a sub urban district in *Ibadan*. Six different house holds, a large compound with a building to simulate the *Baales* palace and two dusty pathways were selected. The houses were all old, built with mud, thereby simulating a village setting and with local goats and chickens wandering about. Permission to undertake the filming was obtained from members of the local communities and a few people

volunteered their house and compound at no cost for filming.

In the production stage, preparations were made to shoot the film. The actors rehearsed their scripts by practicing their lines several times over. The picture crew rehearsed many times with the actors by performing every detail of the scenes and making necessary adjustments to enable them get the best shots. The make-up artist made the characters to look like local people in the village by applying make up to simulate the Yoruba traditional facial scarification marks on some of the actors. Filming was done with several wide, medium and close shots. Filming lasted a week.

At the post production stage, the film was edited by a film editor and a sound mix comprising sound effects, background sounds and music as well as computer graphic effects were added digitally using video editing software.

The video was previewed by a team of eight people comprising a paediatric dentist, community health dentist, two community health nurses, and four lay community members from low socio economic group who will be the target audience. They evaluated the clarity and comprehension, appropriateness of the language and cultural sensitivity of the information. They also checked if the videos showed the content.

The following feedbacks were received: The information was not completely understood as they felt the story line was not very clear in one of the scenes. However, they stated that it was culturally sensitive, video pictures illustrated the content, and language level was good and appropriate. The feedback resulted in modifications of relevant parts of the script for improved clarity allowing a better flow from one scene to the other. This feedback resulted in further film shooting to affect the corrections. The development of this video was approved by the Oyo State Research Ethical Review Committee in *Ibadan*, Nigeria.

Conclusion

This film will be sent to suburban and rural areas with a view to assessing its effectiveness among community health nurses, Traditional Birth Attendants and community members from the lower social class. It is the intention of the authors that this storyline will be videotaped into the Igbo and Hausa languages, the two other major languages in Nigeria. In addition, this videotape can be repeated in other African settings whose society experience similar misconceptions about tooth eruption.

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