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DEVELOPMENT OF A TOOL FOR DISPELLING MYTHS ASSOCIATED WITH NATAL/NEONATAL TEETH: "*ADUNNI*" A HEALTH EDUCATION VIDEO IN A NATIVE NIGERIAN LANGUAGE

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ABSTRACT

Studies have revealed that Nigerians irrespective of social class have negative attitudes and practices towards children born with natal teeth and those who erupt teeth within the first 30 days of life. This has been associated with the strong cultural myths and beliefs that exist among the populace. Children with natal teeth and their families have been stigmatized and are believed to be cursed. This stigmatization affects their social life and consequently impacts on their quality of life. Therefore, there is a need to develop an intervention such as a video to help dispel these myths. Videotapes have been shown as an intriguing means of communication and valuable tool in health education.

To help dispel the myths associated with natal teeth, and neonatal teeth a twenty-eight-minute culturally appropriate video in the a local Nigerian language (Yoruba) titled "*Adunni*" targeted for people from the low social class was developed.

This film has been sent to primary health care centers in suburban and rural areas and will be shown to mothers, pregnant women, nursing mothers and traditional birth attendants with a view to appropriately inform them and the entire communities that eruption of natal or neonatal teeth is not a curse.

Keywords: Child, Natal teeth, Neonatal teeth, Health education, Video

INTRODUCTION

Parents are usually overwhelmed with joy at the emergence of their baby's first tooth. As this is believed to be a significant land mark in their child's development.

Differences in time have been reported regarding eruption of primary teeth in children[1-5] and many studies revealed that tooth eruption usually commences between 6-9 months of age.[1-5] However, primary teeth occasionally erupt prematurely during the neonatal period.[6] Natal teeth are teeth present at birth and neonatal teeth erupt within the first 30 days of life.[7] Several theories have been postulated regarding emergence of natal and neonatal teeth. A possible etiology of natal/neonatal teeth has been thought to be related to heavy exposure of affected infants mothers to polychlorinated biphenyls.[8] In addition, natal/neonatal teeth have been associated with cleft lip and palate and syndromes namely Ellis-Van Crefveld, Pierre Robin and Sotos syndromes.[9] The most acceptable theory is the superficial localization of dental follicles probably related to hereditary factors.[10] Therefore, the condition may just be an individual variation in the child.

Some authors have reported prevalence rates of natal/neonatal teeth to be 1 in 2000-3667 live births[11-13] while others reported 1 in 6000 -8000.[14] Prevalence rates of natal teeth in Nigeria are not known even though individual cases have been documented in literature.[15-18] In clinical dental practice, the alarming feature about infants who present with natal/neonatal teeth is the extremely high level of distress and anxiety in their mothers. This because in Nigeria, children with such teeth are culturally believed to possess evil supernatural powers and are viewed with disdain. Of greater concern are the health care workers who should be at the vanguard of dispelling associated myths but unfortunately believe in these misconceptions.

Bankole and Oke[19] in their study on attitudes and beliefs of nurses in Ibadan, Nigeria to natal/neonatal teeth reported that 41.3% will be frightened and astonished in a labour ward if they helped deliver a baby with natal teeth. Furthermore, (39.7%), recommended extraction of such teeth and 11.1% of them would advocate traditional spiritual cleansing rites prior to the tooth extraction. Whist studying the beliefs and attitudes of Nigerian Traditional Birth Attendants (traditional midwives) to natal teeth in infants, Bankole

et al.,[20] revealed that (31.9%) believed natal teeth were caused by evil spirits, (31.3%), stated that children with such teeth behave strangely and (41.1%), were convinced that the children will develop evil spiritual powers. For this reason, (4.9%) of them would advise parents to get rid/or hide the child.[20] The inherent danger is that wrong counsel may be given to parents by these health care workers and affected children may be neglected, stigmatized and exposed to danger. To dispel these myths, oral health education is pertinent. One of the ways of intervening is by employing health education videos as a means of oral health education among community members and some health care workers.

The use of videotapes is an intriguing means in communicating with audience. Videos are valuable and effective health education tools.[21-26] Generally, visuals have been found to have greater impact than the written word as the message can be given at once in comparison to the written/printed message transferred over time to make its impact.[27] An added advantage is that visuals gives the viewer a series of moving pictures that is buttressed with graphics texts and sounds which is not attainable with the traditional print.[28] The video tape can demonstrate procedures and concepts that may be difficult to explain or translate in print. Other advantages of videos have been attributed to better retention of what is seen, and having a lasting impression on the target population. Leake[29] stated that visual memory is rapidly acquired and longer standing than auditory memory.

Health behaviours are known to be culture bound therefore, prevention intervention programmes should develop from a knowledge of and a respect for the culture of the target community.[30] Matthews *et al.*,[31] stated that people are usually more fascinated with health promotion messages set in a story in their social and cultural background. Wong *et al* [32] while attempting to improve adherence to antiretroviral therapy among South Africans found culturally sensitive video tapes very effective.

Currently in Nigeria, there are no known documentation of a culturally appropriate health education video in a major local language such as Yoruba on natal/neonatal teeth. Based on inappropriate beliefs and poor attitude of Nigerians to natal/neonatal teeth we decided to develop a culturally appropriate health education video on natal teeth in the Yoruba language targeted at the low social class with a view to appropriately informing the public that eruption of natal/neonatal teeth is not a curse.

Background

Based on misconceptions about natal teeth among community health workers and nurses, it was necessary to produce an educational tool that will appropriately inform mothers, nursing mothers, pregnant women and other members of the public about these teeth. A twenty eight minute video in a major Nigerian language (Yoruba) titled *Adunni* was developed. *Adunni* is the name of a girl in the video born with a natal tooth. This video was targeted at local community members (particularly mothers and pregnant women) and health care workers in rural and suburban communities. The purpose of this video was to demonstrate that the presence of a natal or neonatal tooth is not a sign of a curse or an abomination affected on the child and child's family.

The video was developed with the following message:

- Natal /neonatal teeth usually occur as a natural occurrence.
- The community should not be shocked and surprised and feel that the child is weird
- Natal /neonatal teeth are not caused by evil spirits or mothers contravening traditional taboos or by prolonged gestation.
- The affected child's family is not under a curse.
- Children born with natal /neonatal teeth do not behave strangely, develop evil spiritual powers and do not have mental retardation.
- Child born with natal teeth should not be hidden or got rid of.
- Children born with natal /neonatal teeth should not be stigmatized.
- Children born with natal teeth should be taken to the hospital for examination.

In recent years, Nigerians have embraced the culture of watching home movies and posters heralding new arrivals of home movies are pasted almost everywhere. Nollywood, the Nigeria movie industry is the third largest in the world and has produced thousands of films reflecting various aspects of the Nigeria culture and tradition.[33] Many Nigerians particularly from the low social class have a preference for Nigerian films in the indigenous language, and they spend long hours watching these films.[34] The authors thus wanted to leverage on this habit of watching home videos since reports have shown that using culturally appropriate and sensitive videotape as a health education tool been found effective among Nigerians.[35] The authors believed that a culturally appropriate videotape would be a more relaxing way to gain the interest of the populace while educating them and dispelling myths associated with natal teeth. To enhance the acceptability and cultural appropriateness of this video among the

local community, actors who perform in local home video films were chosen from the actors' guild in the local government theatre actors' association. They were people that the target population could identify with as celebrities.

The story

The video is about a baby called *Adunni* who was born with natal teeth. The first scene shows a grandmother returning to the village from a visit to the town (that was cut short) to see her son *Adesola,* his wife and new grandchild who was born with a natal tooth. Distraught and upset, she informs everyone that her daughter in law had given birth to an abomination. Her friend persuades her not to be upset and tells her the consequences of her action. Her friend also narrates real life incidences of two families with different attitudes to their children who were born with natal teeth.

The second scene shows the first family who had a daughter *Adunni* born with natal tooth. *Adunni's* parents told everyone in the neighbourhood about the uncommon presence of natal tooth in the mouth of their daughter. Members of the community did not socialize with her family as they felt they were cursed.

In the third scene *Adunni* now seven years old is stigmatized by peers as no one at school and in the neighbourhood wants to play with her. She is lonely, upset and cries often

The fourth scene shows *Adunni* as a frustrated teenager. She is left out of many community activities because she is considered as possessing evil spiritual powers. Almost anyone in the community blames *Adunni* for misfortunes happening to them.

In the fifth scene *mama Adesola's* friend narrates how 22 years ago, she gave birth to a baby girl with natal teeth and her family members did not inform any one in the community because of fear of stigmatization (This is the second family). She further informed her friend that the girl grew up to be a medical doctor and would be visiting in a few days time.

In the last scene the doctor visits her parents in the village and Mama Adesola's friend decides that her daughter (the doctor) should counsel M*ama Adesola* to dispel all her misconceptions about natal teeth. When the elders and village heads heard about the counseling, they decided that it should be extended to the whole community. The whole community assembles and the doctor explains to how natal /neonatal teeth develop naturally and children with such teeth are not weird and their family is not under a curse. She emphasizes that natal teeth are not caused by evil spirits or mother contravening traditional taboos.

She stresses that affected children should not be stigmatized but should be taken to the hospital for examination. She told them the hazards and risks associated with patronizing quacks and traditional dentists.

Development of the video

An idea about health education on natal/neonatal teeth by one of the authors was developed into a story which had its background in the Yoruba culture. The story was titled *Adunni. Adunni* is a Yoruba name given to females. The baby born with natal teeth and in the video was named *Adunni.* All the authors agreed to tailor the video to individuals from the low socioeconomic class since the misconception was quite common with people from their population groups. The services of an experienced professional script writer was engaged. Screen play was written and reviewed by members of the team which included one community health dentist, a paediatric dentist and a lay person. The team members deliberated on the translations of some difficult English words and terminology and correct translation of these words in the Yoruba language was agreed upon. Screen play was redrafted several times to improve dramatization, accuracy, organization, dialogue and style. This process took about two months so that the message could be delivered in an interesting way.

Pre- production

Before the video was produced several auditions were undertaken and actors were selected for their appearance, age and personality by the casting panel which consisted of the producer, director, a paediatric dentist and a community dentist. Their talents as individual actors was considered. Actors and their dresses, background music and scenery that was germane to the target population was chosen to be used and a production budget was drawn up.

The producer looked out for appropriate locations to shoot the film and specifically ensured that they were places with minimal distractions in terms of noise and interruptions. The locations used for film recording included three households and alleys in Amuloko and three households and alleys in Yemetu Igosun. Amuloko and Yemetu Igosun are both suburban areas in Ibadan, Oyo State Nigeria, and the neighbourhoods composed of old mud houses which were set up simulating village settings. Permission was obtained from the members of the local community before film shooting commenced and some had to be

compensated financially. Several rehearsals were done by members of the cast and the costumes used were typical of the cultural Yoruba attire.

Production

At this stage, the raw elements for the videotape were recorded. Appropriate lights were set for indoor shots. Indoor and outdoor film recording were done with digital camera and the action was shot with long and short takes. Filming lasted one week. A highly motivated team working on the project consisted of the actors, director, producer, technical consultant and the authors. There was a good team spirit among actors and producer.

Post production

Editing was done by the film editor and rough cuts undertaken to select and order the best shots while fine cuts undertaken by getting all the shots to flow in a seamless story. Voice recording was synchronized and sound mix created. Computer generated graphics were digitally added.

Pretest of the video

This video was pilot tested for validity by showing it to four community members from the lower social class, a pediatric dentist, a community dentist and community health nurse. The video was watched and assessed to determine if the message was clear and understandable. In addition, the language was assessed for its appropriateness to the target audience and if the graphics and scenes were acceptable. The cultural sensitivity content of the video was also evaluated.

The following feedback was received:

They felt that the flow from the first scene to the second scene was not smooth enough and wanted improved clarity. Furthermore, they stated that in the fourth scene, the appearance of Adunni as a teenager did not have enough of a villagers look and dressing. They also suggested that there should be a greater display of negative emotions regarding the reaction of the community towards Adunni in the third and fourth scenes.

They stated that the language was appropriate and good, and that the medical terms were clearly explained. Furthermore, it was culturally sensitive and the dressing generally appropriate to the Yoruba ethnic group. They concluded that the video pictures adequately illustrated the content were of the opinion that it is relevant and appropriate and will influence perception and dispel myths associated with natal/ neonatal teeth.

The comments received from the feedback were discussed with the producer and appropriate adjustments and corrections made in the final video production which took one week.

Distribution

This film will be sent to local government clinics and primary health care centers in suburban and rural areas and shown among mothers and pregnant women. Its effectiveness will be tested among pregnant women, nursing mothers and traditional birth attendants from the low social class in the nearest future.

It is intended that this videotape will be translated into the Igbo and Hausa languages, the two major languages in Nigeria and vernacular English which is spoken by minority tribes in South-south geopolitical zone in Nigeria

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